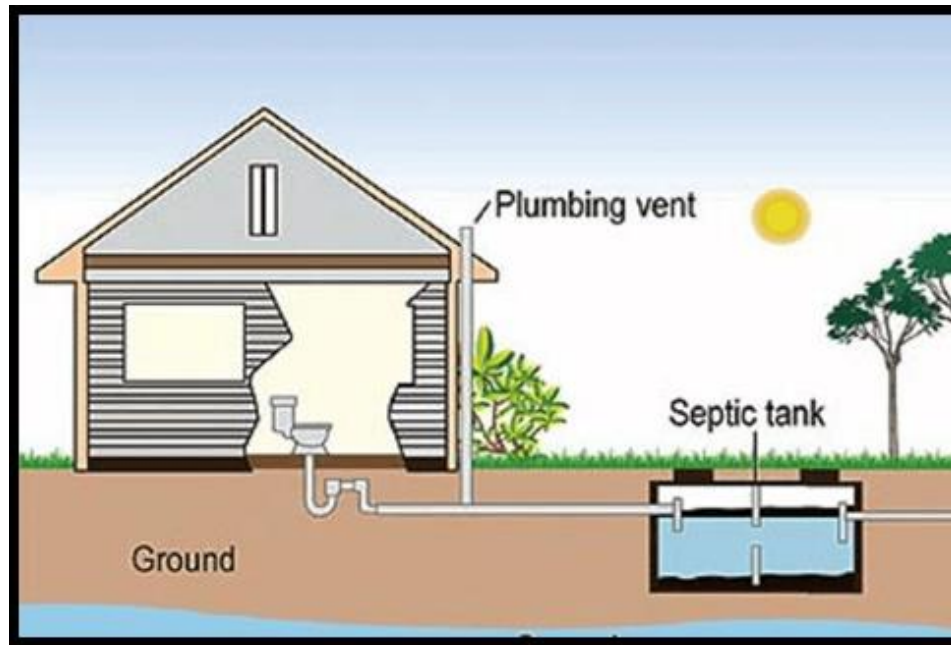


## On-Lot Disposal Systems

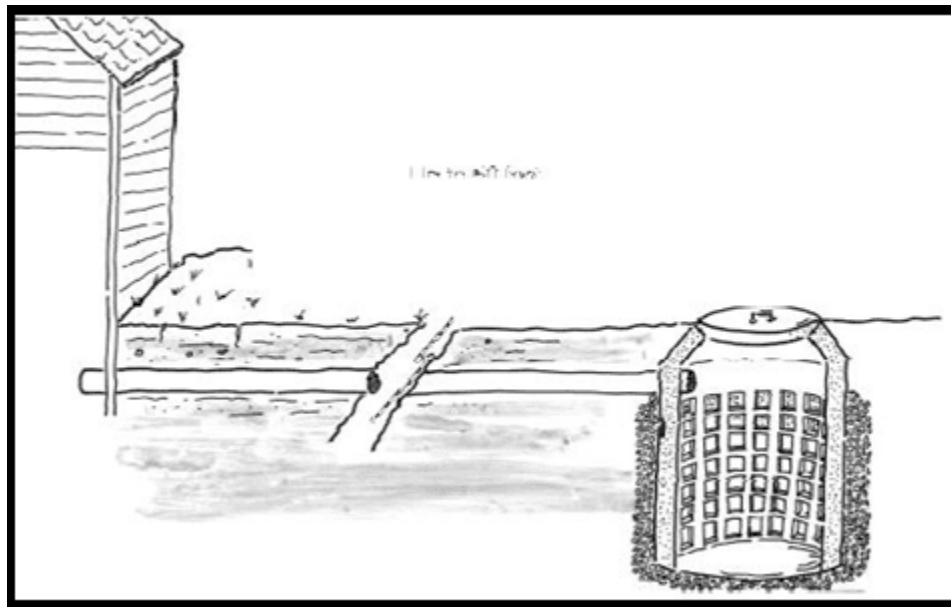
- **Individual On-Lot Disposal System** - An individual sewage system which uses a system of piping, tanks or other facilities for collection, treating and disposing of sewage into a soil absorption area or spray field or by retention in a retaining tank.
- **Community On-Lot Disposal System** - A system of piping, tanks or other facilities serving two or more lots and collecting, treating and disposing of sewage into a soil absorption area, a spray field, or retaining tank located on one or more lots or at another site.
- **Public Sewer** - A system of pipes which carries wastewater away from your property. The pipes are often located under a public pavement or road and convey the sewage to a central treatment plant.

## Types of Tanks

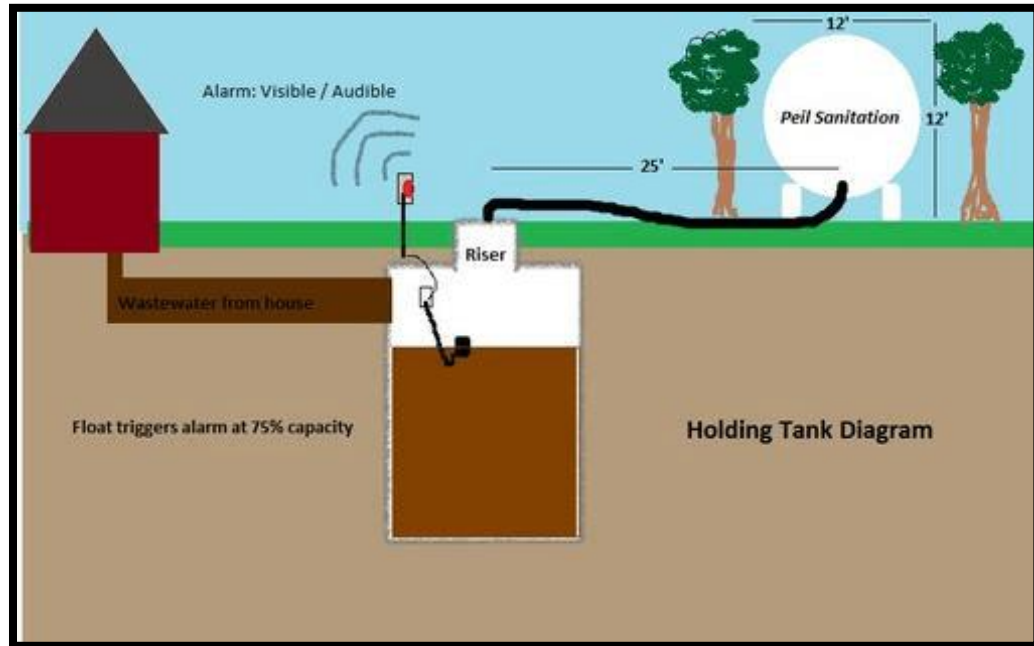
- **Septic Tank** - A large concrete watertight “box” also known as a treatment tank; with an inlet and outlet pipe. The septic tank treats the wastewater naturally by holding it in the tank long enough for solids and liquids to separate, forming three layers inside the tank. Fats, Oils, and Greases float to the top, solids heavier than water settle at the bottom of the tank, and a middle layer is partially clarified wastewater. The top and bottom layers remain in the septic tank where natural bacteria continue to break the solids down. The sludge and scum that cannot be broken down are retained in the tank and build up until it is pumped. The middle layer of partially clarified wastewater is sent to an additional septic tank or to the absorption area.



- **Cesspools/Seepage Pit** - A cylindrical excavation with an open bottom and walls lined with unmortared stone or concrete block. Raw sewage is discharged into the cesspool from a sewer pipe connected the building drain and settles to the bottom. The remaining liquid sewage waste (effluent) is absorbed into the soil through the open bottom and porous sides of the structure.

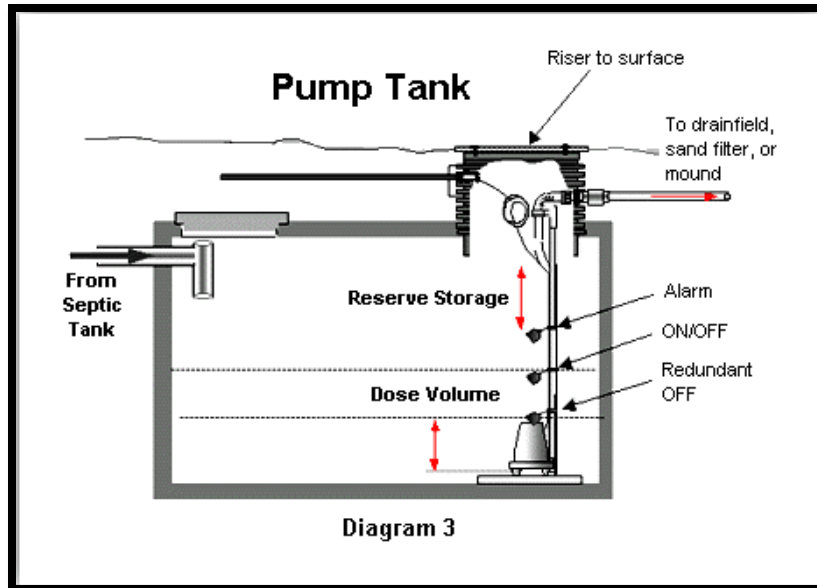


- Holding Tank** - A watertight tank used for sewage collection and storage. No treatment is provided with a holding tank. Pumping and hauling to an off-site location are required. This system is often temporary and outfitted with high level alarms to prevent overflowing.



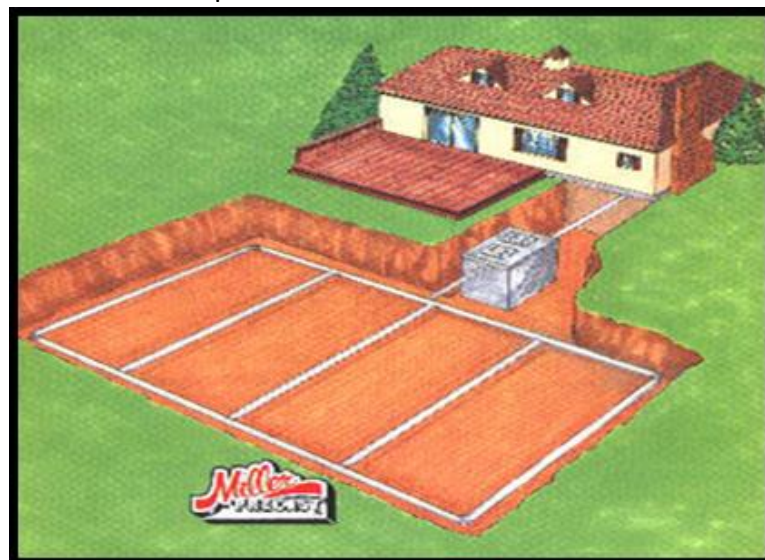
### Pump Tanks

- Pump Tank** - A pump (dosing) tank located after the septic tank or other sewage tank and before the disposal area for effluent distribution. The pump tank is needed in the septic system when gravity is not sufficient enough to move wastewater from the septic tank into the disposal area or percolation rate falls below that for a gravity dosed disposal area. The function of a sewage pump tank is to move sewage liquids and solids between one location and another at specific intervals. Pump tanks contain a sewage effluent pump, control floats, and a high-water alarm.

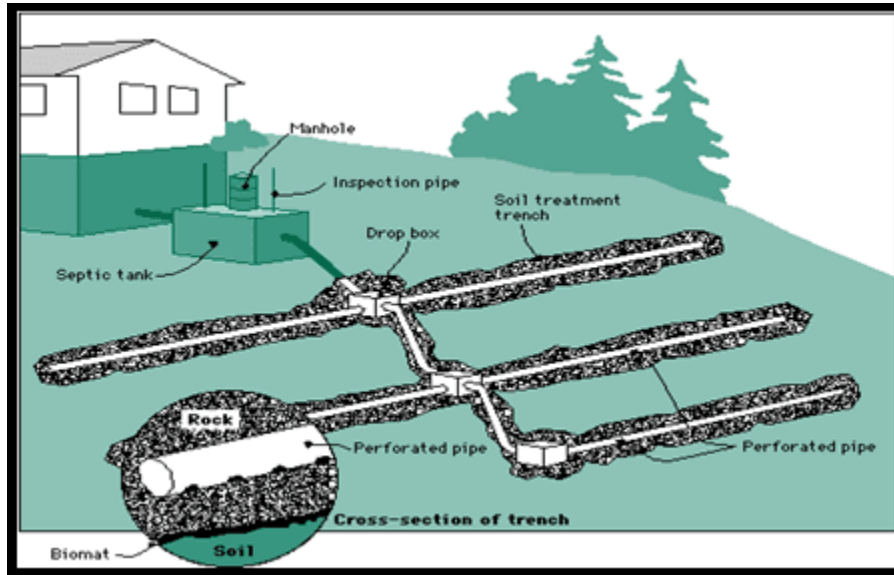


## Types of Absorption Areas

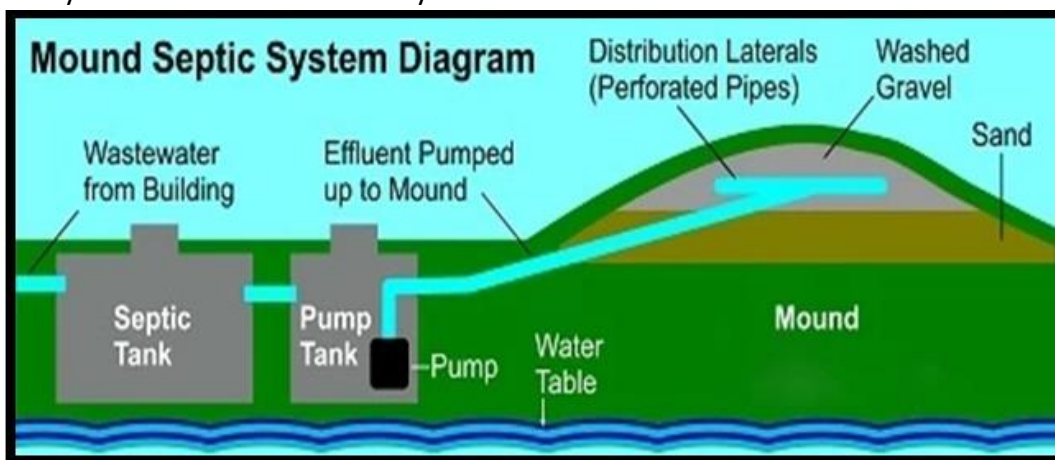
- In-Ground Bed** - This system is used when the property provides gentle slopes (less than eight percent). An in-ground bed resembles an air mattress and includes a header. This area receives the liquid effluent from the septic tanks and distributes it over a rectangular area or areas. The effluent then filters through the soil under the pipes and is treated chemically and with the bacteria by the components of the soil. In-ground gravity absorption areas can be placed on sites that have soils with percolation rates between 6 and 60 minutes per inch. To provide adequate treatment of the liquid discharged from your treatment tank, four feet of suitable soil is required under the soil absorption area.



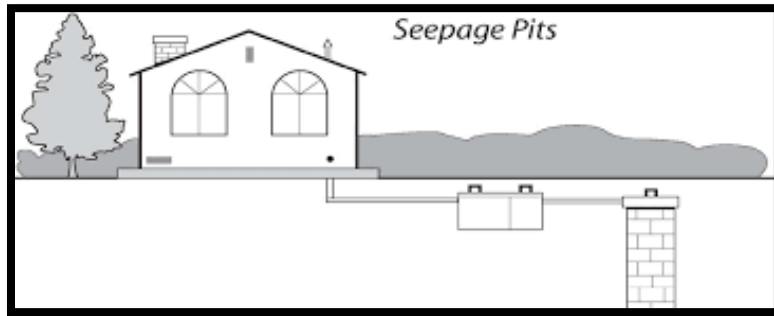
- In-Ground Trench** - This system is used on properties that have a maximum slope of 25%. A standard trench absorption area consists of two or more excavated linear trenches in which perforated pipes or laterals distribute effluent into a layer of crushed stone under the pipes.



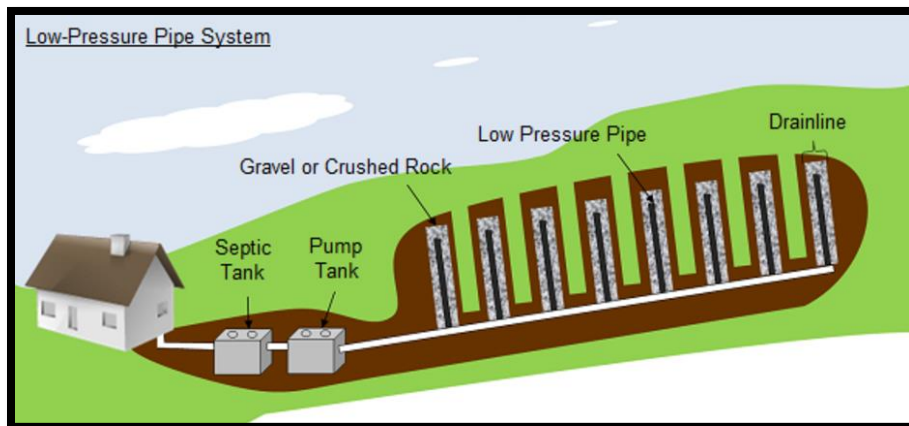
- Elevated Sand Mound**- This system is typically used in circumstances with reduced permeability; when rock or a water table is too close to the ground surface to allow for an in-ground system. This design utilizes a soil absorption system constructed above grade. Sand is placed on top of the ground to make up for the lack of soil depth, and the stone and pipe are placed on top of the sand. Sand fill is used to enhance treatment of the wastewater prior to entering the natural soil at the site. Sites that may be unsuitable for a conventional leaching system may be suitable for a mound system.



- **Seepage Pit-** A seepage pit is very similar to a cesspool, that is lined with a porous, mortarless masonry wall. In this system, effluent from a septic tank but wastewater flows first into a septic tank, and then into a seepage pit which is a porous lock or stone.



- **Pressure Dosed In-Ground Bed-** This system consists of a septic tank, pump chamber, and a subsurface soil absorption bed. The treatment mechanisms are similar to those of conventional systems; 36 inches of native soil constitute a fixed porous medium on which aerobic bacteria provide secondary wastewater treatment.



- **Pipe to Ditch/Stream Surface-** A release of authorized treated discharge into a fresh body of water. These not commonly used today. These are only used if a Small Flow Sewage Treatment Facility is used, which are DEP regulated.



## Possible Malfunctions

- Green Lush Grass
- Wet or Spongy Areas
- Wetness or water at the surface
- Odors (rotten egg smell)



## Water Supply Systems

### Public Water

A public water system supplies water to more than one home designated areas of the Township. Aqua America provides public water supplies to the Township. Public water systems withdraw water from rivers, lakes, reservoirs, and wells and then deliver it to our homes, businesses, and schools.

## Private Wells

- **Drilled Wells-** A well that is built with machines for rotary or percussion drilling. They can be more than 1,000 feet deeper than dug wells. Due to possibility of chemical or mineral additives being present, these wells need to be installed with screens and casing to avoid the collapse and influx of sediments and other particles.
- **Dug Wells-** A well that is formed and built by initial excavation of the land area through the use of a hand shovel until it reaches lower than the water table and when the incoming water surpasses the bailing rate of the digger. Dug Wells are highly susceptible to contamination because they only obtain water from shallow aquifers.

## Well Depth

- **Well Depth-** On the underside of the well cap, the depth should be displayed.
- **Well Head Casing-** The well head is a short piece of casing that sticks out of the ground (at least two feet above flood plain). The casing is typically hollow steel or PVC pipe used to line the inside of the drilled hole (wellbore) and is essential for protection of groundwater and aquifers.

