MOUND

A mound is a large, above-ground septic system that uses imported sand for filtration. It consists of a septic tank, a pump tank and the drainfield which is in a mound of sand. The pump chamber can be incorporated into the septic tank, but is more commonly found in its own second tank. The septic tank must be placed accordingly so that it is downhill from the home/building's plumbing. A bio-microbial process in the septic tank treats the waste before it reaches the pump chamber. Further settling occurs in the pump chamber, ensuring that the pump does not send solid material to the pods.

The pump chamber contains two floats: a low level/off float (lower) and a high-water alarm float (higher). Time dosing is set upon installation. The system will turn the pump on a set number of times each day for a set amount of time. If the system pumps too much effluent out of the pump chamber, the low level/off float will turn the pump off automatically until its next dose time. If the effluent level in the pump chamber rises too high between doses, the high-water alarm float will trigger an alarm which indicates that something is wrong with the system or that dose times need to be adjusted to occur more frequently. Time dosing protects the mound from flooding, which reduces the effectiveness of the filtration processes.

The pump transports effluent to the mound. There, a valve box evenly distributes the effluent between the lateral lines. **The system must use a pump even if gravity flow can be achieved from the pump chamber to the mound**. This is to ensure that the valve box is pressurized so all of the laterals receive the same amount of effluent. Each lateral line has orifices that allow the effluent to reach the soil throughout the entire mound at the same rate. The effluent then filters through the sand in the mound to the soil and is clean by the time it reaches the water table.

A mound system should have an operation and maintenance inspection done twice every year. Concurring reports may need to be turned in to the county. Further, inspections may be required at various points during the installation of the system.

A common mound size is 34 feet by 93 feet, but shapes vary significantly with design because of the large size of the mound. Septic systems are sized according to the amount of waste they will be treating, usually estimated by the number of bedrooms in the home. For non-residential buildings, water usage usually determines the size.

Upon installation, grass can be grown on the mound. A valve box lid and 24-inch riser lids above the tanks will all be visible after installation. Each of these lids will be flush with the final grade and can be walked on, mowed over or disguised to lessen noticeability. Four-inch monitoring ports will be visible on top of the mound.

Mounds should be treated as fragile to increase their longevity. Animals should not be allowed on mounds and vehicles should not be driven over them. Vegetation with intrusive roots should not be planted near them. Finally, a home owner should be mindful of what is going into the system.