



ONSITE WASTEWATER TREATMENT SYSTEMS STANDING WATER IN MONITORING PIPES

An On-site Wastewater Treatment System (OWTS) consists of two main components, a septic tank and soil treatment area. Each soil treatment area (“leach field”) is required to have at least one observation (monitoring) pipe to allow the level of water in the soil treatment area to be observed. When removing the cap from a soil treatment area (STA) monitoring pipe, water may be visible. Occasional standing water may not be a problem; however, water that stands or “ponds” within the soil treatment area for several weeks may be a result of one of the following problems:

- A leaking plumbing fixture may be adding too much water into the OWTS. For example, a single leaking toilet can add an additional 1,000 gallons per day into your OWTS.
- Too much water is being used in the house.
- If your OWTS has trenches, the wastewater coming out of the septic tank is not being evenly distributed to all the trenches and is sending water to one trench more than the others.
- The soils in the treatment area are clogged and are not absorbing the water at the design acceptance rate.

To address the problems above, the following are recommended.

1. Check your plumbing fixtures for leaks or hire a plumber to check the fixtures. If leaks are discovered, have them repaired as soon as possible.
2. Conserve water in the home and reduce heavy use on a particular day. For example, if you normally do several loads of laundry on one day, do your laundry over several days instead.
3. Consider having a water meter installed to monitor the amount of water used in the home. A typical OWTS is designed to accommodate 150 gallons of wastewater per day for each bedroom in the home. So, for a 3-bedroom home, the OWTS is designed for a peak flow of 450 gallons. If you notice significantly more water being used, this will shorten the life of the OWTS.
4. If your OWTS has trenches and a distribution box, have the “d-box” checked to see if the outlet pipes are all at the same elevation. In some cases, the “d-box” may be buried below the ground and may need to be excavated. If the outlet pipes are not level, “speed levelers” are available to equalize the water flow to the pipes, and restore even flow to each trench. Speed levelers are simple to install and are relatively inexpensive.
5. If your OWTS is a “drip irrigation” system that is dosed with a pump, have the pump floats and settings checked. Improper float settings may result in the absorption area receiving too much water each time the pump runs.
6. If your OWTS is a “drip irrigation” system, check to make sure that you are rotating the flow on a regular basis to the separate zones in the absorption field. These systems are designed to leave one zone turned off for several months, then to turn it back on and shut off the next zone. This is similar to rotating tires on a car, and allows each zone to dry out. ***Make sure to rotate the zone that is shut off on a regular basis, and that only one zone is turned off at a time.*** This is critical to the function of this type of system.



If standing water still persists after checking the above recommendations, it is possible that the soils in the treatment area are clogged and are not absorbing water at the designed acceptance rate. If this is the case, you should monitor the water level on a monthly basis. If the water level in the observation pipe is found to be increasing, you should consider expanding the OWTS by installing an additional soil treatment area. This will allow the existing soil treatment area to “rest” and recover while the new soil treatment area is being used. TCHD does not recommend or endorse mechanical means of soil treatment area remediation, as they provide very temporary benefits, and do not permanently repair a STA.