

TexasSpec Inspections

ABC's of Septic systems

If you are new to septic systems rather than public sewer, there are some things that you will need to know. Many people have a pre-conception when it comes to septic systems. They might have heard nightmare stories about septic systems backing up and the things homeowners have had to go through to fix them. Not surprisingly, they might be a little "gun-shy" about buying a home with a septic system in place. Septic systems aren't lawless, but neither are public sewer systems. It is always possible that you will have a blockage in your sewage drain lines.

There are two basic types of septic systems. The systems that most people associate with are the older conventional system style with the "lateral lines". There is usually no mechanical device attached to these systems. Over time, the affluent (solids) break down and migrates into the lateral lines where it leaches into the soil. You can often see these lateral lines in the dry summertime as bright green streaks in the yard or fields.

The second type of system is the newest technology. These are called "aerobic" systems. These are actually mini-wastewater treatment plants not unlike the huge plants that might serve a city. The technology is really very simple. In this system, the matter is broken down in two different tanks. The first tank is the settling tank just like the tank on the older style systems. The material is broken down without oxygen and then moves from the first tank to the second tank. The second tank has PVC drain line ran into the bottom of the tank section which is attached to an air compressor, located on the surface. The air compressor constantly forces oxygen into the tank, breaking down the matter "aerobically" or "with oxygen". There is also a third tank, which is simply a holding tank. When the third tank reaches a certain height, a float switch activates the sprinkler pump which pumps the water out to the sprinkler lines and spray heads. Between the second and third tank is an exposed pipe which can be easily accessed from the surface. About once a month, chlorine tablets are dropped into this pipe section. The treated water slowly washes by the chlorine tablets and is chemically sanitized. It should be noted that, septic chlorine tablets are NOT the same as swimming pool chlorine tablets.

It has been stated by some in the industry that the water coming out of a properly maintained aerobic septic system is approximately 95% pure. You be the judge for yourselves. The water is dispersed onto the property just like a regular sprinkler system or sometimes a drip irrigation system.

By the way, if you are looking at a home with the older style system with lateral lines, don't let that scare you off. I have had more than one septic inspector tell me that they prefer the older systems because of their simplicity, minimal maintenance, and cost savings. There are virtually no moving parts to replace. If they are working correctly, they are "out of sight and out of mind".

Both types of septic systems are engineered before installation and inspected after they are installed, but only the newer style aerobic systems require continual inspections. The technology "aerobic systems" require little maintenance, but when you have mechanical, moving parts, it is inevitable that something will eventually fail. The good news is that these systems are designed for quick repairs. It is usually nothing more than pulling up a sprinkler pump from a tank and dropping in a new one, replacing the small compressor at the surface, or cleaning or replacing a filter. The chlorine tablets must be added at intervals, but that is just dropping tablets into a tube. In the State of Texas, the aerobic septic systems

must be inspected 3-4 times a year by a licensed septic professional. This is a maintenance program required by the State of Texas and is not an optional. These companies charge about \$150 to \$200 per year for the inspections, but if they find something, it must be repaired. Under current State changes in the law, it is now possible for the homeowner to take a certification course on their particular brand of septic system and to perform the maintenance themselves. Check with the Texas Commission on Environmental Quality or visit them at www.tceq.state.tx.us.

Both types of septic systems are recommended to be pumped about every three years. This will cost approximately \$300 depending on the size of the septic tanks. Many homes with the conventional style systems have never been touched or pumped and had no problems. I would suggest to err on the side of caution and to pump your system periodically for peace of mind. This is especially true if you are purchasing a home with either type of septic systems.

If you're buying a property that has a septic system, you will want to have the system inspected by a Certified and State Licensed Inspector.

Call TexaSpec Inspection at 281-370-6803 to schedule your inspections.