

Brothers Create First Onsite Wastewater System Public Utility Company in Tennessee

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They may not be portrayed as legendary heroes in history books, like fellow Tennessean Davy Crockett, but the Pickney brothers in their own right have made their mark in Tennessee.

The four brothers, Bob, Charles, William, and Thomas created the first regulated onsite wastewater system public utility company in Tennessee. The company, established in 1993 as Onsite Systems, Inc., and now known as Tennessee Wastewater Sys-

tems, Inc., manages cluster-type wastewater systems for 40 housing developments across the state.

The developers pay the capital cost to put the wastewater systems into place, and once the systems are completed, Tennessee Wastewater Systems takes over from there. "We are excited about this concept of fully owning, operating, maintaining, and managing these decentralized systems all across the state," Charles Pickney said.

The Roots of Tennessee Wastewater Systems, Inc.

The brothers, excluding Charles who came on board in 1995, started out as a small engineering company in the mid 1980s. One of their areas of expertise was installing onsite systems, and in doing so, they began to realize the need for a decentralized, cluster-type septic system design.

As Charles Pickney explained, "My brothers went around the country in the late 1980s and early 1990s talking to people to find out what worked and what didn't work, with the idea that they wanted to do something here in Tennessee to cut down or eliminate the failure rate with onsite systems."

The type of system the brothers discovered and now use is a watertight effluent collection system. Each home or business has an interceptor

tank, which is similar to a septic tank. Then, depending on the topography, either a septic tank effluent gravity (STEP) or a septic tank effluent pump (STEG) is used. The predominant type of treatment used is a recirculating sand gravel filter.

The design of this system is cluster-like, because the effluent collection goes to a common decentralized treatment facility nearby where the treated water is put back into the soil through drip irrigation.

Once the brothers found a system that was environmentally sound, they went to the local regulators and discussed their idea of a utility company to operate and maintain these systems. But the concept was not initially welcomed with open arms by the planning commission, Bob Pickney said. "I told them my grand scheme, and they basically laughed

at me because it had never been done in Tennessee before," he said.

Eventually, the regulators came around. Then the brothers had to petition the Tennessee Regulatory Authority with their proposal of providing wastewater management service to some area of the state in order to become a public utility company. While the business of the public utility company is regulated by the state, the stock of the corporation is owned by the Pickney brothers.

Services Provided

After a developer has an onsite system installed by an engineering construction company to the utility company's standards, the utility company takes over control of the system. From that point on, the utility company owns, operates, and maintains the system.

Tennessee Wastewater Systems manages the onsite wastewater systems for Horseshoe Bend, a condominium development in Bedford County, Tennessee (shown in first three pictures), and for the Tinnell Valley Subdivision, a residential development in Wilson County, Tennessee (shown in fourth and fifth pictures).





Charles, Bill, Bob, and Tom Pickney

The public utility is an EPA class five-model provider regulated by the Tennessee Regulatory Authority and Tennessee Department of Environmental Conservation Water and Pollution Division.

Homeowners receive a monthly bill just as they would if they were connected to a larger centralized sewer system. An average monthly bill is \$35.11. Bob Pickney said that the utility company's rates have held steady since 1999, and he doesn't foresee an increase in the next four or five years. "Our bill is basically what our costs are with a small profit (approximately \$2.80 of each monthly bill is profit), and at the end of the day we are just managers," he said. "We subcontract our maintenance and most of the functions that we do, but we manage the systems for our customers."

Bob Pickney noted that there has been controversy between some wastewater haulers and the class five providers. "There's a huge concern in the industry that class five providers will come in and put everybody else out of business because not as many traditional systems are being installed, and these systems are instead being installed," he said. "What really happens is that we become managers, and we subcontract out to people

that normally install traditional onsite systems and have them install these watertight systems and pump the tanks when needed."

Pros and Cons for Land Developers

Dwight Pennington, a developer and owner of Pennington Construction Inc., admitted he initially had reservations when he first heard of Tennessee Wastewater Systems. "I was probably the most negative person when they first presented it to me," he said. "I thought, 'There's no way that's going to work, and I don't want to do it.' But the more I read about it, the more of an advocate I became."

Pennington is now a customer with a subdivision of 40 homes named Oak Point in Coopertown, Tennessee. "It's going great," he said.

Charles Pickney said that the initial capital cost for developers includes the cost of installing the collection system along the streets, the construction of the treatment facility, and the installation of the drip irrigation system. In addition to those costs, which may vary depending on the geography of the land, the system for each individual home can possibly cost anywhere between \$2,000 and \$4,000, depending on whether or not it is a gravity or pump system.

The initial capital cost and work involved can be pricey, but it is worth the investment, Pennington believes, because this concept of an onsite wastewater system public utility company allows him to develop land that would otherwise be deemed useless. "You change a piece of property where the maximum

value is just farmland into ground that can be developed," he said.

This type of service is valuable in areas where no centralized public sewer is available and the land does not allow for a traditional onsite septic system. "Our greatest benefit is where soils are bad," Bob Pickney said. "Say you have a 150 acres of land and there are only 10 or 15 acres of good soil in one corner of it. We can take those good soils and use that for our land application and the developers can build roads and houses on the bad soil."

Future Expansion

This idea of an onsite wastewater company has apparently caught on. Bob Pickney said that the company has a great demand for service and is planning on expanding significantly throughout the state.

Part of this success can be attributed to the benefits of this type of system; benefits not only for developers, but homeowners as well, because they don't have to worry about their onsite septic system. "Our subdivision is the hottest thing around here," Pennington said. "We feel that it's because people have the flexibility of a four- or five-bedroom home versus a three-bedroom home on a septic system. With this system, they also have the flexibility of using a garbage disposal without worrying about ruining their septic system. So there are definitely some pluses for us as developers and the homeowners as well."

For more information about Tennessee Wastewater Systems, Inc., contact Charles or Bob Pickney at (615) 356-2880.

