

A Xerxes Project Profile

Wastewater Tanks for Alabama Utilities

Xerxes tanks are key part of growing trend in decentralized systems.



For utilities, conventional wastewater treatment systems are often a losing proposition. However, in the state of Alabama, a number of utility companies and cooperatives are discovering a way to meet the growing needs of development in their communities, and actually realize a profit. "There's a great need for utilities to start using decentralized systems," says Billy McLean, owner of Dauphin Environmental Equipment, LLC in Mobile, Alabama. "And Xerxes fits right in because Xerxes has an excellent tank." The first collection and treatment system McLean bid on for an Alabama utility was Hutchins Elementary School. The Mobile Area Water & Sewer Service project specified Xerxes tanks. "And every system since has had Xerxes tanks," says McLean.

McLean credits Kevin D. White, a professor of civil engineering at the University of South Alabama, for bringing to light the efficacy of decentralized wastewater treatment systems in outlying areas. Indeed, it is in the suburban and rural areas that most development is taking place these days. Along with this growth comes the challenge of providing services to areas outside central communities. Utility companies and cooperatives are already bringing electricity and/or water to these areas. Why not also provide wastewater treatment? Traditionally, doing so was not financially feasible, usually costing a utility millions of dollars to run large-diameter pipes to a centralized treatment plant. Centralized systems often require lift stations as well. On the other hand, decentralized systems are very efficient and are much less expensive to install. "The operation and maintenance costs are about a third of conventional systems," says McLean. The result is that utilities can provide wastewater

treatment to customers and not only recover their start-up costs but also create a source of ongoing income. Xerxes agrees with McLean's opinion that such applications are an enormous opportunity for utilities and developers all over the country.

A recent installation for Mobile County Water, Sewer & Fire Authority is an example of a typical application for the Xerxes wastewater tanks McLean orders. The system installed at Haskew Elementary School in Irvington has a 7,000-gallon dosing tank,



20,000-gallon septic tank and 35,000-gallon recirculation tank. The system also serves a subdivision of 66 homes a few miles away. Because the wastewater treatment needs of a school are different from the needs of homes, the joining of the two actually improves the operation of the treatment system as a whole, McLean explains. Each home has a tank to filter septage, so filtered effluent from the homes is carried to the wastewater system comprised of Xerxes tanks at the school site.

Another example of a project for which McLean sold Xerxes wastewater tanks to an Alabama utility is the J.E. Turner Elementary School, which has a 20,000-gallon recirculation tank and a 20,000-gallon septic tank. This decentralized wastewater treatment facility for South Alabama Utilities serves the school, nearby subdivisions and businesses, and a 72-apartment retirement community. They all connect to the pressure sewer that runs from the school to the nearby community of Semmes. The retirement community has a 10,000-gallon septic tank and 10,000-gallon dosing tank with a septic-tank effluent pumping package. This pumping package is a cost-saving substitute for a conventional lift station.

When asked what sold him on fiberglass tanks, McLean says "an old-timer in this industry" told him that when you get into tanks larger than 7,000 gallons "fiberglass is about half the cost of cement tanks." Besides, McLean adds, "fiberglass tanks are manageable, light but still strong." When asked what sold him on Xerxes tanks, he says simply, "Xerxes has a great reputation." Long known as a supplier of structurally strong tanks to the petroleum industry, today Xerxes is also a major tank supplier to the water and wastewater industries. That's because more and more engineers and developers are discovering the advantages of fiberglass tanks.

System designers and installers frequently have concerns about concrete septic tanks not being watertight after installation, resulting in either contamination of groundwater or infiltration of groundwater into the tank. The latter causes the system to process groundwater along with septage, which overloads the system and results in inefficient functioning. On the other hand, rustproof, corrosion-resistant fiberglass tanks provide long-term protection (both internal and external) against leakage. The fact that Xerxes fiberglass tanks are watertight is another advantage because of



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increasingly stringent regulations governing underground wastewater systems. Since Xerxes tanks can be equipped for onsite pressure testing, tank owners are assured that their tanks are watertight from the moment they are installed.

Has Xerxes lived up to its reputation in McLean's eyes? Absolutely. "Xerxes has been most supportive," he says. The Xerxes sales representatives are "always checking to make sure that things are going well." McLean's company is in the business of providing cost-effective, environmentally sound wastewater collection and treatment systems to his customers. When it comes to wastewater tanks, that's Xerxes' goal, too. One of the major advantages Xerxes offers its customers is versatility. Xerxes wastewater tanks are available in sizes up to 68,000 gallons, and can be designed and manufactured to fit a variety of wastewater needs, including septic, recirculation, dosing and holding tanks.

Working with customers like Dauphin is one way Xerxes offers innovative solutions to its customers at a competitive price while taking care of the environment at the same time. That's the way Xerxes likes to do business.

Project Profile	Mobile Co. Water, Sewer & Fire
Application	Wastewater Treatment System
Site	Haskew Elementary School
Location	Irvington, Alabama
Installer	Hughes Plumbing & Utility Contractors
Engineer	Goodwyn Mills & Cawood
Tank Manufacturer	Xerxes Corporation

Project Profile	South Alabama Utilities
Application	Wastewater Treatment System
Site	J.E. Turner Elementary School
Location	Semmes, Alabama
Installer	South Alabama Utilities
Engineer	Speaks & Associates
Tank Manufacturer	Xerxes Corporation

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