

Midlander wants to conserve water drop at a time

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One drop at a time, Midlander Stanley Weiner wants to conserve the world's water resources.

"I've been looking at water issues for seven-and-a-half years," said Weiner, whose company, STW Resources offers water reclamation and management services. "The technology is there," he added, noting he has looked at "so many" technologies and utilizes technology from a number of manufacturers.

His target markets are hydraulic fracturing flowback, produced water, acid mine drainage-contaminated water, desalination and treatment of brackish water and municipal waste water.

"Everyone is wondering where we're going to get fresh water," Weiner said. "We have it underneath our feet. The water that comes out of our equipment is cleaner than what comes out of the tap."

The company has focused its attention on the Marcellus Shale gas play in Pennsylvania, executing a term sheet to gain \$5 million in funding from Kodiak Capital Group LLC. This funding, Weiner said will give the company working capital for obtaining permits and engineering for his initial projects in Pennsylvania. The company will first be addressing the acid mine drainage that comes from old coal mines that have been abandoned. Plans are to set up two plants each capable of cleaning a million gallons of AMD water a day. The cleaned-up water, he said, can be used in hydraulic fracturing of Marcellus Shale gas wells. The company also plans to clean up the fracturing flowback and make it available for reuse, saving millions of gallons of fresh water from being used.

Pennsylvania caught his attention, he explained, when he realized the Marcellus Shale play would cover 35 million-plus acres and yield gas wells producing 5 to 7.5 billion cubic feet of natural gas from 7,500 to 8,300 feet. By comparison, the Barnett Shale play near Fort Worth covers two million acres.

"My operations manager and I went to Pennsylvania and started asking questions," he recounted. "I knew the wells they would be drilling and I knew, with 35 million acres there would be thousands and thousands of wells drilled. When I saw there were only eight disposal wells, I said 'That's our target.'"

Pennsylvania formations are not suited for holding disposed water, he pointed out, so producers have to truck water to Ohio where there are formations available. But, he said, that costs \$6 to \$12 a barrel and not only results in wear and tear on the roads but increased pollution from the trucks traveling to Ohio.

Texas operators are aware of his company and his technology, he said, but find it more economic to truck or pipe produced water to one of the 50,000 disposal wells available in the state.

“It’s a question of will they spend their dollars with me or send their water to a disposal well?” he said. Approximately 250 billion gallons of produced water is generated in Texas annually, and almost 35 percent of that water has high levels of total dissolved solids, making it unfit for use. “Even if just some of that water was cleaned and introduced as fresh water into the ecosystem, that would be a vast source of clean water supplies,” he said.

A second market he hopes to develop is treating municipal waste water.

“Municipalities like Midland and other small communities around here, the Environmental Protection Agency is telling them they have to upgrade their water treatment systems,” Weiner said. “They’re using 90-year-old technology. We can come in, put our equipment on top of the existing plant and provide clean water cheaper.”

Not only could he clean wastewater effluent until it is equal to fresh water and sell it to citizens for less, he said, but that clean water could also supply the proposed power plant to be built near Penwell. He also hopes to address the brackish water found in North Texas and even around Andrews, where residents are being given reverse osmosis systems.

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