

QUICK FACTS

Project:

Jackson County Water & Sewerage Authority

Project Type:

Rehabilitated clarifier and associated equipment for municipal wastewater treatment plant with a rated capacity of 0.5 mgd serving 1,500 people.

Location:

Jefferson, GA

The Situation

Would it last another day? Another five minutes? Such questions plagued Mark Dudziak's mind each day he looked at his clarifier at the Jackson County Water & Sewerage Authority (JCWSA) (see below right). As Operations Manager, Mark became increasingly challenged working with the vintage clarifier built in the 1960s. He knew the equipment was on borrowed time. "The clarifier components were rotted," Mark noted. "We welded together what we could, but we were running out of pieces to weld. It could have fallen apart at any minute." With failure imminent, Mark didn't have time for a normal lengthy bid process, but he couldn't afford to be held over a barrel, either: the JCWSA had a tight budget and limited resources.

The Solution

Mark turned to his engineering sales representative, Bill Cannon of Templeton & Associates. Bill recommended Amwell, knowing their reputation for quality and performance. But Mark had never heard of them. "I get guys knocking on my door all the time," Mark said, "And many manufacturers promise the world but fail to deliver." Mark then remembered there was a clarifier in his old hometown back in Wisconsin that had been working since he was a kid. He put in a call back home to see what brand of clarifier it was. The answer? Amwell. "That pretty much sealed the deal," admitted Mark. Other vendors were considered, but no other vendor was able to "even come close" to Amwell's price and delivery. Amwell's 130 year history and full service approach were the final pieces that Mark needed for him to trust them with this sensitive project. What happened next made Mark an Amwell fan for life.

The Middle Oconee WWTP has only one (1) clarifier in their process train and because of the age of this old clarifier, no existing drawings could be located to give any details of the tank structure or of the clarifier mechanism itself. Mark had expected to be involved in a laborious task in getting as built dimensions for

his old clarifier so AMWELL could build the new equipment to match existing conditions. He was also very concerned with the allowable downtown of the clarifier and its impact on his effluent quality. Mark's mind was put as ease when he realized that AMWELL had included in their bid the services of a professional surveyor to shoot all the required dimensions and elevations at the site. The surveyor showed up at the site in the morning and had acquired all the needed information by the end of the day. The clarifier was put back on line before the day was over. Amwell's service continued to impress Mark throughout the project. With no room for error on the critical path to equipment install, Amwell's field site survey and drafting staff...



BEFORE

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Amwell saved me \$250,000. Amwell had flawless performance from idea to finish. They exceeded all my expectations. I'll definitely be using them in the future.

> Mark Dudziak, Operations Manager

The Solution Continued...

worked in tandem and corrected drawings to match site conditions within hours, not days. JCWSA's contractor and Amwell worked together so well that every step of the project was completed in a 'right-the-first-time' way. In just two months, the old, disintegrating clarifier was replaced with a new pier supported 50-foot diameter clarifier. Maintenance-free FRP weirs and baffles replaced painted carbon steel components, and an easily accessible ANSI/AGMA rated cast iron precision spur gear drive replaced the previously submerged chain drive, both of which significantly eliminated future maintenance costs and provide reliable performance.



AFTER

The Results

Equipment

Before Amwell

- · Frequent clarifier breakdowns due to corroded materials
- · Clarifier ran in sub-optimal manner which made meeting water treatment objectives a challenge

After Amwell

- · Maintenance-free operation since the day the clarifier was put in; not one problem
- · Water treatment objectives easily met with well-functioning clarifier

Man Hours

Before Amwell

Needed to hire outside contractors for any repairs, which averaged 3 people for 8 days to make repairs twice a year = 384 man hours per year for repairs

After Amwell

Saved 384 contracted man hours (approximate \$20,000 yearly cost saving)

Maintenance

Before Amwell

- · Poorly functioning clarifier resulted in increased sludge build up and increased sludge cleaning and removal costs
- · Old drive was submerged, requiring disruptive tank shut down for repairs
- · Corrosion increased cost of maintenance

After Amwell

Reduced maintenance cost by:

- · Installing corrosion-resistant parts
- · Optimizing mixing and flow, which reduced sludge build up and removal need

Operating Period

Before Amwell

Basin shut down for 1-2 days at a time during the year for repairs

After Amwell

Equipment runs 24/7/365 with no major operational interruption

For more information on how Amwell can assist in meeting your water and wastewater treatment needs, please contact us today

