

HARRIS COUNTY MUD DISTRICT PLANTS REDUCE OPERATION COSTS WITH PRIME SOLUTION'S ROTARY FAN PRESS 2.0®

SEGMENT

Waste Water
Treatment Plants

SOLUTION

Rotary Fan Press 2.0

LOCATION

Harris County, TX



“One of the main reasons we looked for a permanent sludge handling solution was the inconvenience and prohibitive cost of renting portable presses to come on site and manage our sludge. We were at the mercy of the rental companies to fit us into their schedule every two to three weeks, whenever we could get them to show up. This, coupled with the cost of paying over \$250,000 per year for hauling, led us to find a permanent solution that would make our job easier and be more cost-effective. This solution definitely saved us money.”

— Tony Scarborough, Senior Wastewater Operator for MUD District 165 and H2O Consulting

Harris County MUD District 165 in Cypress, TX, has two wastewater facilities that are extended aeration, and return-activated sludge systems that service just under 12,000 customers. Future expansion will increase this number to 28,000 customers. With the continued increase of sludge volume, the plant needed to solve the challenge of keeping up with sludge dewatering. After talking with other municipalities who were using Prime Solution's Rotary Fan Press®, and trade associations and vendors who were familiar with the press, Tony states they could easily see the Rotary Fan Press was the way to go.

Plant Challenges

Harris County MUD District Plants 1 and 2 experienced delays with having their sludge dewatered as the local portable press companies simply did not have the capacity to be on-site to meet their needs. This caused a backup of sludge in their system impacting the settling properties and overall performance of the treatment process.

Solution

With the leadership of Tony Scarborough and H2O Consulting, the facilities searched for dewatering equipment and came across Prime Solution's Rotary Fan Press®.

“When looking for a replacement for the mobile presses our main considerations were footprint, reliability, and something that would produce a dry cake to reduce disposal costs.”

— Tony Scarborough, Senior Wastewater Operator, Harris County MUD District 165 and H2O Consulting.

Additional Benefits of the Rotary Fan Press:

| Benefit | Effect |
|--------------------------------------|---|
| High Cake Solids & Capture Rates | Lower Disposal Fees |
| Small Footprint with Same Throughput | Low building and retrofit cost |
| Low Maintenance | Reduced time and cost |
| Expandable Throughput | Designed for future expansion if needed |
| Easily Automated | Reduces need for hands on operator time |
| Mechanical Reliability | Minimizes downtime |

- **Time Savings:** “Once you set your parameters for this device, such as the sludge consistency/sludge solids, your flow rate, and polymer rate, once you have those three in balance you can walk away from the system. There is no constant adjustment. You turn it on and walk away and come back only when you need to change out the container being filled with cake.”
- **Customer Service:** “I have nothing but respect for Prime Solutions service technicians. They have answered every question I have ever had. They respond immediately unless they are on an airplane. There is not any problem we have had that we were not able to work out over the phone.”

— Tony Scarborough, Senior Wastewater Operator.

When asked if he would recommend the Rotary Fan Press® to other companies Tony stated, “Absolutely. I have already done this. I would highly recommend it to other customers. I have had other municipalities come in and tour our facilities to see the press, specifically looking to see if they wanted to purchase one. And I have given a good recommendation to each one of them. As a matter of fact, I believe we may be purchasing another one.”

Build America, Buy America Act

Prime Solution, a U.S.-based Build America, Buy America (BABA) compliant manufacturer, has over 200 installations and 22 years of experience providing mechanical dewatering solutions. Known for delivering simple, successful, and sustainable systems, Prime Solution helps treatment plants reduce their operational footprint, lower operating costs, and minimize operator time. The Rotary Fan Press® is available in various sizes and configurations to meet the needs of different facilities. Prime Solution, the nicer people to work with.

SPECS

- 24, 36, and 48 inch diameter
- Sludge Cake Conveyors
- One to Six Dewatering Channels
- Emulsion Polymer Systems
- Free Standing/Skid Mounted/Mobile

APPLICATIONS

- Municipalities
- Food and Beverage
- Industrial
- Agricultural

