



Wastewater Division of City of Apopka, FL

Background

Jerry Bowser, Chief Operator for the Wastewater Division of the City of Apopka, said that the overall amount of sludge and pressing per week was becoming problematic and they were seeking to reduce this as much as possible.

Applications

The city of Apopka began with a pilot program to examine what aspects of their process the Pro2 might benefit, including the decant volume, pressing process and hauling of waste.

Objectives

Objectives included increasing efficiency at the end stage of the wastewater treatment, and decreasing costs associated with sustaining the necessary processes.

Results

Bowser stated, "After many years in the business, I was skeptical, but after three days or so, I was astonished. About 14 days later, we still hadn't needed to press, and the amount of decant we got was phenomenal. We went from running 5 to 7 truckloads per week to only needing to press 14 days later. When we finally did press, the amount of solids off the press had increased roughly 15%. The system has minimal maintenance cost and lower electrical use for huge savings. It will also save us on oxygen and polymer. We also expect it will increase the life span of the press."

The increased capacity made available by the Pro2 prompted an upgrade in the city's system. The existing press was appropriate for the amount of solids

Results (continued)

produced by their old system, however, with the surprisingly larger percentage of solids from using the Pro2, they have decided to reinforce the press to pursue an even greater percentage of effectiveness and efficiency.

"24 hours after starting the Pro2 system, we were getting results, which previously would have taken 2 to 3 days. In the 550,000 gallon digester we were able to take about 300,000 gallons of decant out, so we also gained greater use of the digester."

Even during the short duration of the pilot program with the Pro2, Bowser could see cost savings, due to the drastically reduced amount of biosolids to haul. That alone made it financially worthwhile, but they also saw that savings would carry over into all steps of their process.

Bowser went on to say "The setup of the Pro2 system is well planned, with first-rate installation, and the flexibility of the system is allowing us to fine tune the balance between the physical and the biological parts of the treatment process."

Hauling Expense



The client was able to reduce solids hauled off of their press from 5-7 truckloads per week to approximately 0.5 truckloads per week.

This Pro2 was installed at the end stage, the digester, but Bowser speculated "Seeing the impact we've had, and since we have a carousel process with mechanical mixers, with a Pro2 setup in my aeration system, I'm certain we could improve the beginning stages, which in turn would have a huge impact on the end result."