Plant's Unique Circumstances Enable Acquisition of Septage Technologies That Improve and Protect

"Our plant is a modestly-sized facility that normally would not consider septage treatment technology of Huber's caliber due to the capital requirement. But there is a consistent theme throughout our industry that – even among newer septage receiving stations – few systems perform well when it comes to the solids separation. But we were fortunate to have grant assistance to help us consider the higher end equipment to achieve our desired results."

Brian O'Kelley, 18-Mile Creek Upper Wastewater Treatment Plant Director

18-Mile Creek Upper Wastewater Treatment Plant is the central location for 6 facilities managed by a 7-person staff. Though their facilities do not exceed 1 MGD, they are designed so the staff conducts operations in a very hands-on manner. They've recently implemented the RoFAS Septage Drum and WAP Washpress at the central location, and Plant Director Brian O'Kelly has high expectations for its results.

Funding Help from High Places

The 18-Mile Creek Upper WWTP is your typical modestly-sized plant that must perform exceptionally well. A 1986 moratorium sparked action for the construction of the Regional 18-Mile Creek Upper WWTP. The moratorium was driven by:

1. NPDES discharges from numerous private and public facilities
2. Insufficient treatment technologies
3. Discharging to a very small receiving stream
4. DHEC's requirement for a designated septage receiving facility for the County

The RoFAS Septage Drum and WAP Washpress were added in 2016 to improve the reliability classification of this facility to meet the utility's performance expectations.

Trash Changes Clog Pumps

If you want to know how wastewater characteristics have changed over the past twenty years, enter "baby wipes" or "shop towels" and "sewer" on your computer's search engine. O'Kelley uses a number of these type articles to educate the citizens in Pickens County, SC on the impact of their actions on their region's wastewater treatment plant. The solids content of today's septage will overwhelm traditional pumping systems. O'Kelley learned all too well the havoc the trash items were wreaking on his pumps.

"Our pumps have a 15-year expected life cycle (based on traditional waste streams). But, modern household products sold in the market place have destructive qualities when concentrated by septic tanks. As a result, the building and replacing of conventional equipment was required many more times than anyone could have predicted. Within the expected 15-year life cycle, pumps were actually being rebuilt or replaced several times. At $25K per replacement, you can imagine what the lack of effective screening technology was actually costing us." Brian O'Kelley, 18-Mile Creek Upper Wastewater Treatment Plant Director

Stop Trash Havoc

Thus far, O'Kelley is thrilled with the two Huber components' ability to clean larger potential clog items out of the flow before it reached the pumps.

O'Kelley doesn't have extensive metrics spanning several years of use to base opinions on, but he can report that in the brief time that the RoFAS Septage Drum and WAP Washpress have been operating, they've processed more than 200 septage loads without issue. This is important for the plant because, regardless of the confidence they have in their haulers, they must protect themselves from that one who may dump one problem load.

"The bonus is that the technology also gives us oversight and control that we've never before had. It helps us to protect ourselves from what we do not anticipate. No one wants a repeat of the chaos, expense and environmental risks that we know can be caused by a single careless hauler." Brian O'Kelley, 18-Mile Creek Upper Wastewater Treatment Plant Director

18-Mile Creek Upper Waste Water Treatment Plant • Location: Liberty, SC

Website:
http://www.co.pickens.sc.us/PublicServiceCommission/default.aspx

Facilities: 1
RoFAS Septage Drum: 1 WAP Washpress: 1