

BARNES®

MUNICIPALITY OF HAMILTON, AL

Application Overview

The municipality of Hamilton is located in Northwestern Alabama. Hamilton's sewer district consists of 19 lift stations that cater a population of approximately 6500 residents and has a treatment plant capacity of 1.5 million gallons per day.

The station has high solids content and the City had to pull out pumps monthly due to clogging. Typically rags, hair, mop heads and debris were clogging the pumps. The Hamilton waste water treatment plant's lift station has an unique application as sewage from across the city is pumped onto incline screens in the treatment plant. Water from the screens along with rain-water and debris is collected in a sump. This water is again pumped back to the screens in a closed loop. The city had to de-rag the non-clog pumps on average every month. These pumps were unable to handle solids like mop heads, rags, greasy hairballs, plastics and debris.

Installation

Ron Hylton, Hamilton's treatment plant supervisor, approached Pump & Process Equipment (PPE) for a permanent and cost effective solution for his clogging problems. PPE and Crane Pumps and Systems worked together and provided a Barnes Sithe 7.5 HP chopper pump in June 2017. It's been 8 months since the Sithe's installation and it hasn't clogged once. The first time it was pulled was for a 6-month regular checkup. The Sithe Chopper pump's stainless steel heat treated blades were found in pristine condition and had retained sharpness. It continues to operate as the lead pump in the station obliterating even the biggest and toughest of solids.

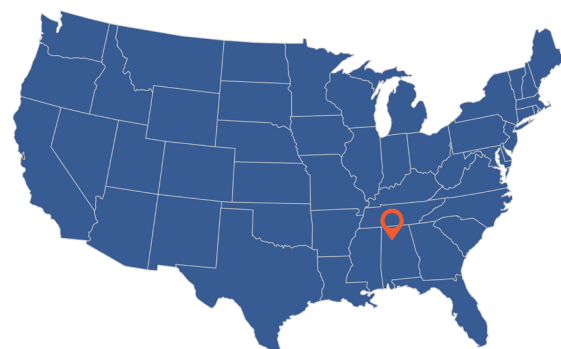
Key Takeaways

Pain Points

- The lift station has a high solid count
- The existing pumps were unable to handle solids like mop heads, rags, greasy hairballs, plastics and debris
- The City had to pull out pumps monthly to unclog

Solution

- CP&S developed and provided a 7.5 HP Barnes Sithe Chopper pump with a mono-vane impeller
- In 8 months of installation the Sithe hasn't clogged
- When it was pulled for the 6-month check up the stainless steel blades were in pristine condition



PUMP

Barnes Sithe Chopper



OPERATIONAL IMPROVEMENT

No Clogging Since Installation



INSTALL DATE

June 2017



MUNICIPALITY POPULATION

6,500

