

BARNES®

EAST RICHLAND COUNTY Columbia, SC

Application Overview

East Richland County Maintenance Superintendent Jack Morin was frustrated with the poor performance of the solids handling pump in the Hughes Lake lift station. The pump was clogging up to three times a week and requiring inconvenient service calls from his maintenance crew. They tried several different approaches to solve the problem, but every approach resulted in more wasted time and money.

The county first attempted to run the existing pumps backwards by reversing the power leads in the control panel, but the pump continued to clog and then the terminals in the control panel were stripped and needed to be replaced. The county then attempted to replace the submersible solids handling pump with a shredder pump. This solution did provide temporary relief, but soon after the station continued to experience frequent clogging.

Pumps, Parts & Service, Inc. (PP&S) a Crane Pumps & Systems' distributor visited with Morin and recommended they try a Barnes 4SHVB non-clog 10 HP pump with vortex impeller manufactured by Crane Pumps & Systems. PP&S offered a special arrangement with the county where they could try the pump for 90-days. If at any time during the 90-day period the county was not satisfied with the Barnes 4SH pump's operation PP&S would remove the pump from service at no cost to the municipality.

Installation

In October, 2011 the Barnes pump was installed onto the existing rail system, alongside the shredder pump. The ANSI/ISO slotted discharge flange design allowed the pump to be installed without any special flange adapters. At the end of the 90-day trial period, the county was extremely satisfied with the station's performance and purchased the Barnes 4SHVB vortex pump.

The lift station has not experienced any clogging since installation and has greatly reduced the maintenance time spent at the location.

Key Takeaways

Pain Points

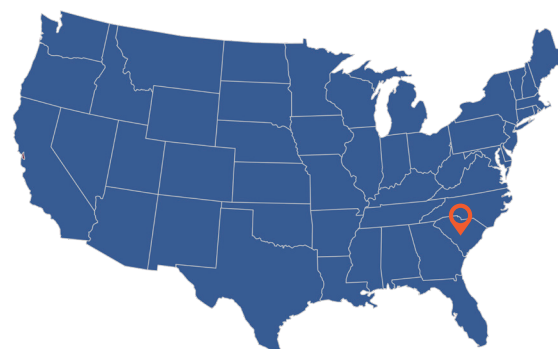
Frequent clogging caused by cleaning rags and other stringy products. Clogs were requiring repetitive service calls during all hours of the day and up to three times a week. The lift station is 25 feet deep, so each service call to clear the clog was time consuming work and inconvenient to the maintenance crew's schedule.

Solution

Crane Pumps & Systems Barnes' 4SHVB 10 HP pump with vortex impeller.

Features:

- 3" solids handling capability and designed to handle stringy solids.
- Discharge flange mated directly to the existing pump rail system with no adapters.
- Pump hydraulics matched the existing HP and voltage requirements of the system.
- Plug-n-Play cord design allows for easy pump removal without having to break vapor seals and connections within the control panel.



PUMP

Barnes 4SHVB Pump



OPERATIONAL IMPROVEMENT

Eliminate clogging



INSTALL DATE

October 2011

“ The lift station has not clogged since we put it in. This has allowed our staff to work on other problems in the system.”

Jack Morin,
Maintenance Superintendent

