

CRANE[®]

PUMPS & SYSTEMS

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2011

Pumps & SYSTEMS

IN BRIEF:

SITE/LOCATION:

Holly, MI

Oak Hill Estates mobile home court, wastewater treatment plant outfitted with Flygt 3085 pump transferring raw sewage from equalization tank to batch reactor.

PROBLEM:

Frequent clogging caused by large raw sewage solids required inconvenient and repetitive service calls, often during overnight hours and inclement weather.

The pump was clogging multiple times a week, sometimes causing the pump motor to overheat and fail requiring even more repair maintenance and potential for the tank to overflow.

SOLUTION:

Jett Pump & Valve recommended a Barnes 4SH non-clog 7.5HP pump with vortex impeller manufactured by Crane Pumps & Systems. The troubled treatment plant is now operating maintenance free.

Key Features:

- Allows 3" solids handling capability and handles stringy solids at low flows.
- Volute designed to allow impeller to form a vortex which passes 98% of the solids without coming into direct contact with the impeller.
- Impeller is specially designed to provide outstanding clog resistance from stringy and other difficult solids.

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Applications & Systems

Clogging Eliminated and Costs Reduced at Oak Hill Estates

The Barnes[®] SH Series Solution

Highland Treatment Inc., Oak Hill Estates' contractor, was frustrated with the consistent clogging of the Flygt pump installed in the mobile home court's equalization basin. The pump transfers large raw sewage solids from the basin to the batch reactor. It clogged constantly and the motor overheated and failed twice. Highland Treatment Inc. was forced to dedicate extensive resources and maintenance to keep the pump up and running.

Highland Treatment Inc. contacted Jett Pump & Valve to provide a rental pump to use while their Flygt pump was being repaired. Jett Pump recommended they replace the pump with a Barnes SH pump, based on its success in an Inkster, MI lift station.

A Barnes 4SHV non-clog 7.5HP pump with vortex impeller was installed. The slotted discharge flange allowed the pump to be installed to the existing discharge piping with no modifications required.



Barnes 4SH



Large sewage raft from equalization basin

The 4SHV pump has not clogged once since installation. Elimination of service calls and maintenance during inclement weather has resulted in significant costs savings and a safer working environment. Highland Treatment Inc., feels assured there is much reduced potential of the equalization tank overflowing, which would have resulted in substantial EPA fines.

"We haven't had to pull it or mess with it since the day we put it in, it's just been maintenance free."
- Mark Dowson, Operations Supervisor