

Porter Medical Center, Middlebury, VT

OVERVIEW:

Porter Medical Center is a medical facility that is an affiliate of the University of Vermont Health Network, and is located approximately 35 miles south of Burlington, VT. The Medical Center is comprised of a 25-bed acute care center, a 105-bed nursing facility including a memory care unit, a rehabilitation unit and a long term care unit. The Center provides high-quality health care to residents in the county and surrounding areas.

LIFT STATION DETAILS:

All wastewater from the Medical Center flows into a duplex submersible pump station from there it discharges to the town's wastewater treatment plant. This station is an extremely critical station, and can result in temporary closure of an entire health wing if there is a sewage overflow due to problems with the pumps.

A few years ago, the Medical Center improved the disinfecting process from spray cleaning to cleaning with wipes to sterilize surfaces. As a result, wipes and cleaning rags started entering the waste stream and started to clog the solids handling pumps in the pump station. The maintenance team tried to solve the problem by campaigning and educating residents and staff to refrain from disposing wipes in wash rooms. However, that did not yield satisfactory results and the team continued to struggle with frequent pump clogging.

The maintenance team had to replace seven pumps in three years due to pump malfunctions or motor burn-outs. The Medical Center's Plant Operations Director Mr. Doug Frary had to keep one or two replacement pumps in stock that they could install in case of an emergency. In addition to this inventory cost, the Center had to pay approximately \$500 to vacuum the wet well each time. A member of the team always had to be available to de-rag the pumps and for pump emergencies. The harsh winters made it even more challenging to clean clogs, and a moment came when the team decided that they "have had enough" and wanted a permanent solution to their problem.

INSTALLATION:

Champlin Associates (Essex Junction, VT), a municipal distributor of Crane Pumps & Systems, worked with Mr. Frary to size and install two 4" Barnes Sithe chopper pumps in the station in October 2018. The pumps have not clogged since installation. Mr. Frary is so delighted and confident in the Sithe chopper pumps' non-clogging capability and reliability that his team members "don't even check on the station anymore". The Medical Center's maintenance staff are extremely pleased with Sithe chopper pumps and with Champlin Associate's passion for solving problems and quality of service.

KEY TAKEAWAYS

PAIN POINTS:

- The existing non clog pumps in pump station clogged frequently due to wipes and cleaning rags
- It cost the Medical Center thousands of dollars to vacuum clean the station every year
- Replacement pumps and a maintenance staff had to be available for immediate service work

SOLUTION:

- The Medical Center installed two 4" Sithe chopper pumps in the station in October 2018
- The pumps have not clogged since installation



PUMP

Barnes Sithe Chopper Pump



OPERATIONAL IMPROVEMENT

Reduced Clogging and Run Time



MUNICIPALITY POPULATION

8,600



INSTALL DATE

October 2018

