AGING COLLECTIONS SYSTEM GETS A LIFT WITH METROCLOUD SCADA

By: Emily Shoop

Like many municipal organizations, Lake in the Hills Sanitary District (LITHSD) was dealing with aging infrastructure. As equipment fails, municipalities are left with the choice to replace the equipment or upgrade their systems with more efficient, reliable, and secure equipment. As a leader in providing innovative and cost-effective solutions, Metropolitan Industries, Inc. can help municipalities upgrade their infrastructure.

LITHSD reached out to us about infrastructure upgrades since we have been working with them for several years. They knew we have the capabilities to work with municipalities to create a custom solution to their problem that works with their budget and timeline. When talking about upgrading their older lift station controllers, we suggested that they upgrade to our LMS II lift station level management controller, which utlizes cloud SCADA. MetroCloud is Metropolitan's secure and dedicated cloud SCADA water and wastewater monitoring service. At the time, LITHSD's systems utilized an older SCADA system that was costly to maintain and had unreliable communications.

Even with the drawbacks of an old SCADA system, we understand cloud SCADA can seem like a big undertaking to those who may feel skeptical, so we invited LITHSD to attend one of our cloud SCADA seminars hosted on-site at Metropolitan's headquarters. At our seminars, end-users can learn about the benefits of MetroCloud and participate in live demonstrations. Our training seminars are free of charge and satisfy IEPA credit requirements for water system and wastewater operators. After the seminar, LITHSD was ready to begin upgrading their system.

We started by upgrading one lift station to the LMS II and MetroCloud. Starting with one of their smaller systems on the cloud allowed the district to test it out. The district quickly saw the benefits of MetroCloud compared to their old system. "It only took us a couple of weeks to convince us that MetroCloud was way nicer than any system we previously had," said Mike Nelson, Assistant District Manager of LITHSD. The district found MetroCloud much easier to use, and it provided more detailed information on their system. After experiencing the benefits of MetroCloud firsthand, the district was ready to upgrade its remaining lift stations. Over the course of a little more than a year, Metropolitan upgraded six lift stations for LITHSD, and also included the implementation of MetroCloud at their wastewater treatment plant, which included a variety of rehabbing and replacing controls for several processes at the WWTP.

Existing Lift Station Controllers that needed replacing were upgraded to our standard LMS II controller. The LMS II level management system is a pre-programmed level controller with a color touch screen operator interface. The system allows users to alter pump options, transducer options, and more,

Five lift stations that service Lake in the Hills Sanitary District. Systems are custom built to meet the specifications of each site. Each system arrives at the site pre-wired, pre-tested, and ready to go.

providing access to SCADA features. The system is a menu-configurable, constant speed or variable speed compatible, pump-down level controller, allowing for the control of one to three pumps, with optional pre-programmed configurations for single and dual-level transducers, 0-20 MA flow meter input, and a completely redundant float backup controller.

As LITHSD upgraded its lift stations to MetroCloud, they were immediately able to enjoy the benefits it has to offer. Their old SCADA system did not provide detailed information on the overall operation of their system or any specifics on alarm conditions. Any time an alarm went off, the old SCADA system did not indicate what the cause may be. Someone would have to go to the site to diagnose the problem and decide what to do to fix it. With MetroCloud, they can remotely see what is happening with their system, determine a course of action, and even make certain adjustments without physically being on-site, saving time and money. "It makes my life so much easier as a maintenance guy," said John Caccamo, Maintenance Supervisor.

The information available with MetroCloud can help municipalities be proactive to potential problems. The district was able to see that a pump at one of their lift stations was beginning to pump fewer gallons each day. They were able to diagnose that the pump was starting to plug. By monitoring their system through MetroCloud, they saw this and fixed it

before it became a problem.

LITHSD reduced their monthly SCADA costs by 97% when they switched to MetroCloud away from older hard-wire telephone lines. In addition to lower communication costs, now they have even more systems tied into the cloud, which provides a more robust overview of their entire system. By reducing the cost of SCADA, customers can use those funds towards other infrastructure improvements. And MetroCloud does not charge for regular software and system upgrades to our SCADA systems, assuring all of our users get all security patches, software updates, and new features for free. Since there are zero on-site servers, we maintain all of these updates, leaving operators to focus on operating their systems.

Upgrading to MetroCloud saved Lake in the Hills Sanitary District significant money on their SCADA costs and made it easier to monitor and operate their system. Municipalities can upgrade their aging infrastructure without breaking the bank and have peace of mind that Metropolitan will be there to assist them throughout all stages of their infrastructure upgrades. "It works wonderfully– it's just been awesome," said Tamara Mueller, District Manager & FOIA Officer.

For more information on MetroCloud, visit our website www.metrocloud.us