



January 15, 2019

Southern Clinton County Municipal Utilities Authority

Volume 12 Issue 1

Inside this issue:

Process—Making it Clean 2

Inspections—The Scoop on the Poop 2

Maintenance—Keeping Things Humming

During the past month, crews kept on with work that is not usually able to be completed during the month of December and into the start of January. It is Michigan and it will change, but staff was not going to complain with the warmer than normal trend and lack of snow which so often occupies a large amount of time during the winter.

Crews removed one of the three pumps at LS501 in DeWitt Twp due to a seal failure and sent it in to assure the pump is still in balance. These pumps are very similar to the Sandhill pumps besides having less capacity and the ability to have clean seal water for seal cooling and contamination removal. The pumps at 501 now use a pressure pot which is a mixture of water and additive and use thermal conductivity to recalculate this fluid. This system was installed when all three pumps were rebuilt a little over 4 years ago. It does work, but needs to be monitored closely. We utilize our infrared imaging to monitor temps and recirculation as small particles or even a sag in

the line can cause an influx in seal temps and improper circulation.

In December, generator load banking was completed on all the portable generators, both plant generators, and station 501. These generators are diesel fueled and it is important to get them under load every few years or sooner depending on the typical load. For instance, the 2 plant generators are not under enough load under normal operation to effectively minimize buildup in the cylinders and injection system. Staff did find an issue with the plant generator while doing the load test. The generator was under producing which led to a fairly simple fix. The governor linkage was loose which controls the throttle when the generator is under load by increasing the fuel depending on the demand of the electrical load. This was a simple fix and we were thankful we found it during testing thus preventing a greater impact if failure happened in an emergency.

Administration

As the year starts, staff will begin looking at budget preparation for the 2020 budget process. SCCMUA will be looking at the retirement costs. MERS has stated a drop in the rate of returns will be coming and this will impact the contributions.

The search to find a new Process Supervisor is well underway with a decision to come shortly. Staff put great effort into getting

the word out to as many candidates as possible. Flyers were sent to license holders all over the state. This type of work is getting more difficult to find people with interest in the field and even more difficult with experience. This is not unique to SCCMUA; the same situation is happening across the United States. With that said, we are confident in filling this position with a qualified candidate.

Year end is underway and the audit has been scheduled for February 4-6.

In November, SCCMUA received a RAP grant for the telemetry project in the amount of \$7,000.

Southern Clinton County
Municipal Utilities
Authority
"The Clean Water People"

3671 W. Herbison Rd.
DeWitt, MI 48820
517-669-8311
www.sccmua.com
www.facebook.com/
sccmua

Process—Making it Clean

All parameters of the NPDES permit were met.

As the holiday season is now past us, we can focus on a New Year and the projects at hand. Plant work is continuous with the large facility we have and the amount of equipment needed to keep things moving. Maintenance and repair activity is a daily operation. Even when there is not an active project in the plant, staff stay busy with preventive maintenance items such as oil changes, greasing, infrared imaging of electrical components, and the list goes on. There are also the inevitable "fires" that arise with unexpected equipment failures or problems that need to be addressed and staff again handles these in stride.

Apparently, RBC train B-1-4 was overly excited for their turn in the rehab and one RBC decided to derail itself a few

months early, prior to the start of the 2019 RBC rehab project. This could be caused by a combination of things. One is shaft wear, even though shaft rotation speeds are low (1.2 RPM) the extreme pressure over time has a tendency to wear the shaft as the bearing surface has a higher Rockwell hardness rating. We are addressing this with our rehab methods with the installation of the sleeve which is more closely matched to the bearing hardness. The other contributing factor could be loping which is where the RBC becomes unbalanced causing an increase in RPM's for only a portion of the rotation. This can create an uneven bearing surface that can potentially allow the shaft to shift. As SCCMUA always keeps extra parts on hand for these, they were able to re-

act and make the necessary repairs to get this operational.

For a period of time in December, SCCMUA experienced an increase in suspended solids. After an initial assessment, it was concluded that a few operational changes should be made before any other potential solutions were looked at. We increased the secondary sludge pumping rate as it had slowly fallen. Additionally, staff looked at the sample mechanism and found a fouled line which could have contributed to the recent increase in suspended solids. At this point, the solids have subsided but we are still looking at different probable sources. We are also looking at the filters to eliminate any possible short circuiting.

Inspections—The Scoop on the Poop

Total new home connection for 2018 are 130. They breakdown as follows:

DeWitt Twp: 35

Bath Twp: 24

City of DeWitt: 14

Watertown Twp: 30

DeWitt Twp Projects

The Quarry: Record drawings were reviewed and approved. Project was accepted by DeWitt Township.

Crowner Farms III: Air and mandrel testing was performed and passed. Cleaning and televising has not been scheduled.

DeWitt Crossing South: Contractor has received all the necessary permits. DeWitt Twp has issued Authorization to Proceed.

Bath Twp Projects

Chandler Lofts/NOCA: No change, developer has supplied design flow for the latest plans. Prein and Newhof have completed capacity modeling.

City of DeWitt Projects

Oaks IV: No change, all testing and manhole inspections are complete. Draft record drawings were supplied and comments sent back to the engineer. Currently waiting for updated record drawings.

Wildflower Condos III: No change, contractor has completed punch list items. Still need to complete vacuum test on manholes and record drawings.

Watertown Twp Projects

Lakeside: Phase 10 record drawings have been supplied. CCTV footage of phase 12 pipe installed but never accepted has been reviewed. There appear to be several areas of possible infiltration. The developer has been informed of the problems and recommendations were presented. Waiting on developer to proceed.

Cleaning and Televising:

Plummer's Environmental delivered the hard drive containing the data and video from the cleaning and televising project. Review of the footage has begun. The cleaning and televising program for 2019 is under review.