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## Southern Clinton County Municipal Utilities Authority

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

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### Maintenance—Keeping Things Humming

When a resident called with an odor complaint, crews identified that the vortex man-hole insert at the discharge of the Bath forcemain had become plugged. These man-hole inserts have been very effective in eliminating H2S issues in long forcemain runs. This is the first time one has been plugged in the SCCMUA system. Unfortunately, the access was inadequate when it was designed and installed. The staff had to wait until the ground was frozen enough to get equipment back to the location to remove the top of the structure to gain access. Staff completed this work in late February after a few weeks of cold temps so that the ground was firm enough to get the equipment back to the location. The insert was cleaned and is now back in operation. Provisions for adequate access have now been made to better monitor and react to future issues.

Radio and PLC upgrades have been completed at stations 112 and 114 in DeWitt Twp. These upgrades have operational and reliability advantages. SCCMUA has made great strides improving our telemetry in the collection system over the past few years. There are more to go, but the work we have completed has had a significant impact and reduced communication failures and increased reliable condition reports and alarms. Each station that is completed gets us closer to our goal of being self-reliant as the staff works toward having the ability to conduct our own programming. This will save SCCMUA sub-

stantial dollars in the future and significantly increase our ability to maintain the system.

The station valve exercising program is taking place with the recent moderation of temperatures. This will provide a jump on the season as the crews will replace faulty valves in the coming months to ensure continued safe operation.

A recent winch failure on our crane truck had staff scrambling for a day or so. The team worked to get a rebuilt winch installed. The staff was able to rebuild a spare winch, so there is a backup on the shelf when needed. The new crane truck is scheduled for delivery at the end of the month; this will significantly reduce the stress of having only one option for the bigger stations in the system.



### Administration

As we start working on the 2022 budget, staff has been identifying budget pricing for items that may impact the long-term CIP.

EGLE has been provided a summary of the model build and inner workings and has also been provided the model. Since this model is built in excel, it can be more easily viewed and understood as far as calculations go. This was a huge benefit making the model this way versus modeling software. With modeling software, formulas operate in the background and are not easily accessible.



## **Process—Making it Clean**

NPDES Permit: All permit requirements were met. Total precipitation for the month was .43".

There is never really anything easy about a wastewater process. When you think you have it down to a science, there is always a curveball thrown your way. No matter how good you may think you have something set up, there is generally still a way it could be done more efficiently and effectively. With this being said, our minds are continuously wondering.... Is this the most efficient and effective way?

What is Supernatant? The supernatant is a transparent liquid overlying sludge material by settling or precipitating. The sludge is pumped into the storage tanks. It sits until the tanks are full and ready to be hauled for land application; the sludge will settle out in the storage

tanks leaving a more transparent liquid-like material on the surface called Supernatant. Supernatant can be drawn out of the storage tanks and recycled back into the plant flow. The benefit of recycling back through the plant flow is that it creates more available room in the sludge storage tanks.

The downfall when pumping Supernatant is struvite or "MAP". Struvite or "MAP" is a composition made up of Magnesium, Ammonia, and Phosphate. Struvite crystallizes and forms a scaling on our supernatant piping's inner walls to the extent of being plugged solid. It helps to add water for dilution as far upstream of the supernatant pumps as possible. Staff is currently changing where the water for dilution is added to our lines. We are moving the

water lines in front of where the Supernatant lines enter the building. We are excited to see the difference, which will lead to less downtime.

The RBC project is underway and off to a good start. We have machined some shaft ends for sleeving, while some ends were still in great shape and ready for bearings. There are still a few shaft ends to inspect and possibly machine. We are excited to be getting an early start on this project and plan on doing the same for next year.

Staff will soon be rebuilding the rotating assembly for our T-6 Mud-well pump. We have a team on hand to rebuild equipment, which comes at significant cost savings to the Authority and allows our staff to strengthen their skills. It is a great benefit to have the team on hand who can take on this work type.

## **Inspections—The Scoop on the Poop**

### **Miss Dig Totals:**

Miss Dig Requests: 172

Miss Digs Marked: 56

Inspection Services: 8

### **Projects:**

#### **DeWitt Township**

Redwood Living: All utility work has been installed and tested; work continued on the site but has been slowed due to weather conditions.

Quarry Village: Pipe installation has been completed. Air & mandrel testing as well as televising have been completed and passed. Vacuum testing of the manhole has been completed.

#### **Bath Township**

Meadowbrook West II: No change. Testing has been completed and passed. Record

drawings have been submitted and are under review.

Webster Rd Extension: Pipe has been installed. Testing has been completed and passed. KEBS is working on record drawings.

Whitehills Woods North: Testing is completed and passed, corrected record drawings were submitted and approved.

#### **City Of DeWitt**

Wildflower: Portions of record drawings have been received along with project submissions on a small portion of the development.

#### **Watertown Township**

Lakeside Phase 11: No change. Record drawings have been submitted and are under review.

