



Southern Clinton County Municipal Utilities Authority

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Bath Township 2019 Annual Report

Background

The relationship between SCCMUA and its constituents is unique but not unheard of. SCCMUA is an Authority that operates the Clean Water Facility located in DeWitt Township and is owned by four municipalities. Bath Township owns 16.7273% of the available capacity at the plant. This ownership equals 836,365 gallons per day and in 2018, flows from Bath equated to 754,281 gallons per day.

The collection systems are operated in a different manner. Each municipality owns their respective systems and contracts with SCCMUA to provide maintenance services. This encompasses various maintenance activities including underground pipe and lift station maintenance. Maintenance is performed on a weekly basis at the lift stations to identify and repair mechanical issues. SCCMUA helps the municipalities with planning by completing site plan reviews. SCCMUA also inspects all sanitary sewer work including new construction or existing system repairs. SCCMUA staff meet regularly with the Township to discuss past work activities and future plans for the collection system, but in the end, all decisions are up to the municipalities to implement and finance. SCCMUA views itself as a partner with the municipalities and shares information to help assist in the decisions that need to be made.

A Look Back at 2018

In 2018, Bath had a very busy year planned in its collection system. The one that everyone saw and was involved in, was the Lift Station 203-replacement project which was large and difficult. This project tested the abilities of everyone involved. The soil conditions were less than desirable, not to mention the weather which we had significant rains during the project and only added to the degree of difficulty as soils in the area are naturally wet. The installation was completed late in the year of 2018. The start up went smooth and the station has operated very smoothly since going on line.

In the 203 project, a small station located near the Fire Hall was removed as this was now serviced by gravity sewer. Some of the components are going to be repurposed into other stations including Lift Station 205 (15688 Park Lake Rd). This is planned for 2019.

Additionally, in 2018 Lift Station 204 (6038 Park lake) was rehabbed by SCCMUA, which include a new pump and updated control panel. This was another great project for Bath and SCCMUA staff, as it shows how much can get done with the greatest care in cost efficiencies.



204 Rehabbed



204 Old

Pumps Replacements:

In 2018, fortunately there were not as many pump replacement or repairs compared to the previous 2 years.

Lift station 202, (5034 Sleight Rd.): Both pumps were rebuilt and one new pump was purchased, as this station is very critical and with the history of repairs on the previous two pumps it was felt this was needed to ensure proper service operation.

Plant Work at SCCMUA

In 2018, the RBC project was in its third year and has been fine tuned and working well. The project was needed in many aspects but the main reason was the search for the lost capacity in the winter months as the RBC would get overloaded. By stripping the biofilm from the media using chlorine, the new cleaned area is available which was previously occupied by dead biomass. SCCMUA completes the work in-house with the Board approved purchase of the “Journal Squirrel” at a cost of \$30,000. This creates a huge savings as previously SCCMUA was paying \$4,500 per end which there are 84 in total being rehabbed. This created a savings of nearly \$350,000 for the rehab project. In total, the rehab project for all RBC’s will cost nearly \$390,000 over a six-year span. This project prolongs the life of the RBC’s which were previously going to be replaced at a cost estimate of \$9 million. So far, the results are promising but it still too early to claim the victory.

Another large project was the replacement of one of our back-wash pumps. These pumps have been in operation since the opening of the plant in 1980. They are responsible for providing clean water back through the filters flushing out solids to be removed in the primary stages. These pumps have been rebuilt, but the structures were getting to the point of no return. SCCMUA opted to replace one pump and this was done with SCCMUA staff at a cost of \$35,000.00.



Old Backwash Pump



New Backwash Pump

Some slight changes were made this year for the Biosolids program in the timing of the land application to better accommodate farmers and the available land. Additionally, one digester was cleaned and inspected. This is done every couple year to perform inspections and eliminate large rag balls from forming. A little more than 1.6 million gallons were land applied to farm fields last year.

2019 Goals

In 2019, SCCMUA will continue to work with the Township to find cost effective ways to solve problems. With the completion of station 208 (5699 Coleman Rd.) in early to mid-2019 the Bath system will be in a good place.

- Station 208 (5699 Coleman Rd.) rehab with in kind components. To be completed early 2019

- SCCMUA to do a phased approach in rehabbing station 205 (15688 Park Lake) utilizing parts from station 216
- Radio system upgrades including elevated tower height increase.
- Continued corrosion mitigation via chemical control of sulfides and the testing of other methods including other methods for clean air induction.
- Work with the Township to identify a long-term plan addressing SAW grant finding and incorporating these into the Townships CIP plan.

SCCMUA Plant Goals

In 2019, the three-original buildings on the grounds will need to be reroofed and this project is getting started with completion in mid to late summer. Additionally, SCCMUA will be completing another RBC rehab including all air components and shaft bearings at an estimated cost of \$65,000.

Staff will be looking at ways to gain any efficiencies in operation which will include limited use of RBC blowers. This accounts for 2/3 the electrical consumption at the plant.

Conclusion

Baths flows have hovered around the 90 percent capacity for some time, nearly a decade. Potentially, this could limit growth if usage increases. Options would have to be looked at to purchase more capacity or eliminate excess flows at the plant.

2018 was a very active year in the Township and 2019 will be the same. SCCMUA will continue to work with the Township and provide recommendations for proper rehabs and maintenance to be more proactive and less reactive. This team or partner approach will help to ensure a stable and effective sewer system for the Township for many years to come.