

CUMBERLAND SANITARY SEWER UTILITY BOARD

September 6, 2017 at 5:30 P.M.

Minutes

1. CALL TO ORDER

6:03 p.m.

2. ROLL CALL

Utilities Office Assistant Katelynn Ernsting called roll with Ana Pea, and David Lahey present. Also in attendance was Town Attorney Dan Taylor and Director of Utilities Steve Yagelski.

3. CONSIDERATION OF MINUTES

* August 2, 2017 Minutes—Approved 2-0 with a motion made by Lahey and a second from Pea.

4. PUBLIC COMMENTS (Please limit comments to 5 minutes maximum)

None

5. FINANCIAL REPORT

* Invoices More Than \$5,000 – Berry Electric – work at WWTP - \$5,660—Approved 2-0 with a motion made by Lahey and a second from Pea.

Fluid Waste Services – annual cleaning/video contract - \$33,563—Approved 2-0 with a motion made by Lahey and a second from Pea.

* Claims Register—Approved 2-0 with a motion made by Lahey and a second from Pea.

6. OPERATIONS UPDATE

GEM Sanitary –

- Michael reported:
 - Briarwood Trace Lift Station pump cost to repair was \$6,147; replacement was \$3,460. Steve authorized the purchase of a replacement pump.
 - BBC is scheduling to pull pumps at Village Green to check head pressure and propellers.
 - He is working with BBC Pump and Gardner Denver to find solution for post aeration blowers.
- There are 206 new connections to the GEM Sewer Utility through July 2017 since its purchase.
- GEM North Plant:
 - Processed 3,052,000 gals of sewage.
 - Plant is at 73% capacity for actual flow vs. design.
 - Maximum Daily Flow day was 182,000 gals.
 - Average Daily Flow was 145,300 gals.
- GEM South Plant:
 - Processed 750,000 gals of sewage.
 - Plant is at 36% capacity for actual flow vs. design.
 - Maximum Daily Flow day was 63,000 gals.
 - Average Daily Flow was 35,700 gals.

Cumberland Sanitary –

- Astbury personnel reported:
Permit Required Monitoring

“The Town of Cumberland acknowledges its responsibility to comply with the Americans with Disabilities Act of 1990. In order to assist individuals with disabilities who require special services (i.e. sign interpretive services, alternative audio/visual devices, and amanuenses) for participation in or access to Town sponsored public programs, services, and/or meetings, the Town requests that individuals make requests for these services at least forty-eight (48) hours ahead of the scheduled program, service, and/or meeting. To make arrangements please contact Christine Owens, Director of Planning & Development at (317) 894-6202 or planner@town-cumberland.com.”

All sampling and analysis was completed in accordance with the NPDES permit. The monthly average Ammonia Nitrogen concentration was 11% of the permit limit, the Total Suspended Solids concentration was 51.8% of the permit limit, and the cBOD concentration was 18% of the permit limit. We are continuing to monitor Total Phosphorus daily on the influent and effluent. The monthly average influent phosphorus was 2.83 mg/L and the effluent was 1.61 mg/L. The percent removal was 56.8%. While this reduction in the effluent is still promising, we will still need to develop a plan to chemically treat the phosphorus.

All samples for E. Coli tested within permit limits for the month.

The area received approximately 7.25 inches of precipitation during the month. This led to extremely high periods of flow through the plant. The daily max that was discharged was 4.634 MGD compared with the daily average design flow of 1.5 MGD and a max daily flow of 4.0 MGD. Through operational adjustments, we were able to keep the facility from violating any permit parameters during these high flows. The facility discharged a total of 36.91 million gallons, which is 79% of capacity.

Sludge Management and Disposal

We are continuing to use the sludge de-watering system that was purchased from Blue River. We have also placed a submersible sewage pump in the digester in order facilitate de-watering the sludge some prior to pump it through the system from Blue River. While this is not as efficient as the centrifuge, it is still significantly less expensive as other forms of sludge disposal. We continue to process approximately 50,000 - 70,000 gallons of sludge per week.

Maintenance and Repairs

We are continuing our efforts to get caught up on deferred maintenance tasks. We have made quite a bit of progress through the last 7 months. We should have most, if not all, of the major projects completed in the next month or so. The facility itself is operating much better than it was when Astbury was brought in to oversee operations of the treatment plant.

The only significant issue we had during the month was a tripped breaker during a storm that prevented the automatic valves from operating. While it didn't cause any major upset this instance, it could have easily caused a major plant upset, treatment bypass, or overflow within the collection system.

We were able to troubleshoot the issue with Aqua Aerobic and get all valves operational. With the recommended upgrade to the auto dialer system by Maxim Automation, issues such as these would be specified in the alarm callouts rather than just a general alarm call. While the town personnel are beginning to become more familiar with the facility operations, it is sometimes difficult to determine why the general alarm has been activated.

The following are updates to the previously identified issues:

1. Aqua Aerobic has been approved to complete a Plant Wellness Program for the facility. This will include two 2-day site visits. The initial visit will consist of a going through the mechanical equipment of the SBR. The second visit will focus on process and system operations. We will provide an update once the visits have been scheduled.
The first visit for the Process/Operational review has been completed. Aqua Aerobic will be providing a report in the next couple of weeks. The mechanical visit has not yet been scheduled. We will provide an update once this has been setup.
2. The level sensors in the SBR tanks are not always accurate. We plan to have Aqua Aerobics staff onsite sometime in the near future to go through all facets of the facility. This situation has not affected the treatment process.
a. All parts needed to correct this problem have been ordered and we will get them installed as soon as possible.
3. Parts were ordered and received to perform an overhaul to the 2 Post EQ blowers and to the backup SBR Roots blower. The SBR blower is ready to be re-installed. Astbury staff will be removing 1 post EQ blower at a time to complete the overhaul to each.
a. All blowers have been overhauled and re-installed.
4. The gas detectors in the headworks building stopped working properly. These are scheduled to be inspected and calibrated on June 2nd.
a. Both of the replacement sensor were installed and calibrated.

5. The centrifuge rotating assembly has been removed and sent out to the Andritz service center for repairs. Andritz will also be completing an upgrade to the centrifuge controls and VFDs. While the unit is out for repair, a temporary de-watering system has been set up and placed into service. We have made a minor change to the sludge feed system, so we can now track the total gallons pumped and will be recording this onsite.
 - a. *Update: The centrifuge repairs are nearly complete. The new electronic controls were delivered. The rotating assembly will hopefully be back early to mid-August.*
 - b. *Latest update: The manufacturer anticipates the rotating assembly and all electronic controls to be re-installed and operational by late September or early October. We will advise once the service/installation dates have been scheduled.*
 - c. *Update: Andritz is scheduled to deliver the rotating assembly on Wednesday, Sept. 6. The Andritz service team will be onsite the week of Sept. 18 to complete the re-installation and commissioning of the RA unit. New controls and drives also will be installed.*

6. The replacement blower for the damaged SBR blower (blower #3) has been ordered. We will provide updates as we receive them.
 - a. *The electrical work started on 8/28/17. Once this work is complete, we will get the air header connected and schedule the manufacturer for startup and training.*
 - b. *Update: Berry Electric has been working most of the week on the wiring for the new blower. Astbury is scheduling workers to get the header piping complete and bolt down the blower housing. Once all is complete, the Roots rep will be scheduled for startup and training. Wessler or Maxim Automation will have to be called to make sure all three (3) blowers are communicating with SCADA.*

7. The following are issues discovered with the U/V System:
 - a. The hydraulic wiping system is inoperable and in need of a complete overhaul. This will include replacing all of the wiper canisters, hydraulic lines, manifolds, and the hydraulic pump. All of these parts have been ordered.
 - b. The intensity sensors of both banks in the UV system have failed and need to be replaced. These have been ordered.
 - c. The low level shut off for the system had previously been removed and needs to be replaced. This has been ordered.
 - d. It was also determined that all the lamps and quartz sleeves need to be replaced. The lamps and sleeves that are currently in use were not purchased through the manufacturer and therefore do not carry a treatment guarantee. The sleeves are cloudy, causing a reduction in UV transmittance. New lamps, sleeves, and o-ring seals have been ordered.
 - e. Several lamp sockets appear to be shorted out/burnt and need to be replaced. We cannot continue the repairs until these are replaced. We have ordered replacement lamp holder sockets and connectors.
 - f. *The overhaul of the UV system was completed in early August. While there were not any new issues discovered, it was noted that the PanelView controller may need to be replaced/upgraded in the future.*
 - Peer Foods has been issued a “draft” industrial wastewater pretreatment permit. Staff is securing seven (7) straight days of 24-hour composite samples from Peer Foods. The results will be used to determine our local limits.
 - Mary has filed 49 sewer liens in Marion County total \$16,452.00 and 29 liens in Hancock County totaling \$9,746.32. The liens were filed on 60-day and 90-day amounts. Customers 30 days behind total 36 customers, or 1% of the total 2005 bills, in the amount of \$1,678.27
 - Cumberland WWTP:
 - Processed 36,910,000 gals of sewage.
 - Plant is at 79% capacity for actual flow vs. design.
 - Maximum Daily Flow day was 4,634,000 gals.
 - Average Daily Flow was 1,190,600 gals.

7. OLD BUSINESS

* Phosphorus Removal Technical Memorandum – Wessler Engineering—Approved 2-0 with a motion made by Lahey for the preliminary approval Phosphorus Removal Technical Memorandum outlined in the Wessler report and a second from Pea.

8. NEW BUSINESS

* Proposal for Electrical and SCADA Work @ WWTP – Wessler Engineering—Approved 2-0 with a motion made by Lahey for the hour not to exceed \$30,000 for SCADA work and a second from Pea.

* Proposal for Inspection Services at Autumn Woods 3 – Wessler Engineering—Approved 2-0 with a motion made by Lahey not to exceed \$12,100 and a second from Pea.

FSG Rate Consultant’s Report 8/7/17 – for submission to SRF to pay Jr. Bond

FSG Rate Consultant’s Report – GEM Only 8/7/17

9. BOARD MEMBER COMMENTS

None

10. FUTURE AGENDA ITEMS

None

11. ADJOURNMENT

6:45 p.m.