

## **TECHNICAL COMMITTEE MEETING MINUTES**

**Wednesday, October 8, 2014**

**2<sup>nd</sup> Floor Conference Room**

**Plant Site, 111 Harbor View Avenue**

**5:30 p.m.**

Daniel Capano	Chairman, Technical Committee
Gerald Bosak Jr.	Committee Member (Absent)
Edward Kelly	Committee Member
William Brink	Executive Director, WPCA
William Degnan	Plant Supervisor, WPCA
Prakash Chakravarti	Supervising Engineer, WPCA

### **1. Call to Order and Roll Call**

D Capano called the meeting to order at 5:30 pm.

### **2. Approval of Aug 20, 2014 Technical Committee Meeting Minutes**

E Kelly made the motion to approve the minutes of the meeting for Aug 20, 2014. Seconded by D Capano; the motion carried 2-0-0.

### **3. Update on the UV system**

B Brink stated that the UV system has been recording erroneous spikes in flow measurements in the UV channels. The system reacts to the spikes in flow measurements by increasing the UV intensity resulting in over dosing, so no exceedances have occurred. Xylem will be coming next Tuesday on Oct 14, 2014 for staff training and their quarterly service site visit, and they will troubleshoot the system to find the cause. The system currently is being operated in manual mode. There is some overdosing but no issues with under dosing or exceedances.

### **4. Odor control update**

D Capano mentioned that he did smell the drier but the odor dissipated quickly. He has not noticed much odor on the streets adjacent to the plant site. B Degnan said that the electricians have installed the controller for pH and ORP sensors at the raw sewage pump station scrubber. Covering the septage receiving manhole will be enforced. He also stated that chemicals are being added to the scrubbers. The recirculation pumps have been throttled back to prevent misting. The pH and ORP probes are working. Jeff Penette of Wright-Pierce is expected to come for inspection of the odor control systems. B Brink mentioned that in the upgrade of the raw sewage pump station the septage receiving station will be moved indoors with a piped connection for septage discharge which will prevent the release of odors from septage disposal.

## 5. Radio communications for the remote pump stations

D Capano mentioned that the antenna at Knapp Street has been replaced and that it had a good signal. The bypass should be removed from SCADA.

P Chakravarti presented the committee with a summary of the collection system prepared by Steve Pietrzyk.

- Tree trimming/removal work has been done at Cedar Heights, Timber Lane, Knapp Street and Soundview II pump stations to improve radio communications.
  - New relays were installed at Timber Lane, Arden Lane, and Clay Hill pump stations
  - New radio communication has been installed at Maltbie.
  - Electrical panel at Knapp Street has been upgraded.
  - Knapp Street antenna was installed.
  - The receiving antenna at the operations building at the treatment plant has been fixed.
  - Burwood radio transmitter has been fixed. It has to be reprogrammed by Knapp Engineering.
  - The next day the on-call bypass setting will be removed from SCADA if the above improvements have reduced nuisance communication alarms previously experienced.
6. D Capano asked for a path study be performed once the leaves fall from the trees this fall. B Brink said that Knapp Engineering can provide the service under their on call contract.

## 7. Update on Construction Projects

P Chakravarti gave the committee an update on the following:

### a. Soundview Avenue sewer lining.

The contractor Precision Industrial Maintenance is working on installing the bypass system. The bypass system is expected to be ready by next the Friday.

He stated that we are also considering opening Euclid Avenue to provide for an alternate access to the Wallacks Point residents. B Brink requested that we solicit prices for construction of the temporary access.

### b. Replace pipe supports in Raw Sewage Pumping Station.

Nutmeg Utilities won the contract and is awaiting a signed contract. All of the pipe supports are expected to be in place by the end of the year 2014.

### c. Progressive Cavity Pumps—Replacement

R H White the contractor is scheduled to start replacing the pumps in

February 2015. The project is expected to be completed by Aug 2015.

**d. Elevated walkway at the UV disinfection.**

The bids are being solicited. The bid opening is on Nov 6, 2014.

Weather permitting the work is expected to be done in Spring of 2015.

**8. Update on Engineering Evaluations and Designs**

B Brink provided a brief update on the following projects:

**a. Raw Sewage Pump Station Upgrade**

Wright-Pierce is evaluating the pump station at the headworks. They have conducted two workshops. We have decided to increase the capacity of the pump station to 68 MGD with one of the the largest pumps in reserve. Options for pump sizing, the options between dry pit submersible vs shaft driven pumps, options for septage receiving and different bar screen configurations by different manufactures have been presented at the workshops. The WPCA staff will be going on a day trip to look at the installations at Norwalk, Stratford, Fairfield and the Mattabassett District.. Wright-Pierce will do a formal presentation of its evaluation and recommendations to the Board

**b. Improvement of Flow Distribution to Final Clarifiers**

Hazen & Sawyer did a workshop to present the hydraulic analysis to improve the flow to the aeration basins and the secondary clarifiers. The return activated sludge could be better controlled with a distribution box or a motor controlled valve on the return sludge line which would be less expensive.

They did an evaluation of the effluent pumps and confirmed that the motors and the variable frequency drives for the effluent pumps are under sized. They recommend installing an air release on the effluent pump's discharge pipe as an intial step to prevent air binding and increasing pump discharge.

They have evaluated the UV disinfection system. . The existing UV system has two channels that can treat 68 MGD when all four banks of UV lamps are on. The CT-DEEP regulations require treatment of peak flow with one bank of UV lamps out of service; which would require addition of a third channel to meet the requirement. Replacement of the UV system along with the installation of a third channel is estimated at \$4 million.

**c. Upgrade of SCADA System**

D Capano stated that he has been working with ARCADIS and the shift foremen in gathering information on the programmable logic controllers, the software and fact finding mission. ARCADIS is expected to completed their study and recommendations by end of July, 2015.

**d. RFQ for the infiltration and inflow (I/I) evaluation**

CDM Smith was selected to do the sewer system infiltration and inflow evaluations. The staff met with them to discuss their scope of services and fees. They plan on installing one flow meter for each 30,000 linear feet of sewer. There would be about 44 meters installed. They are negotiating with ADS and Flow Assessment for pricing. . The meters will be installed in spring 2015. It is hoped that flow monitoring can be done for a year to capture one or more major storm events, following which subbasin metering will be used to identify areas for sewer system evaluation surveys (SSES) including TV inspections and smoke testing. The I/I study and SSES is anticipated to be funded by CT-DEEP at 55%. About \$500,000 per year will be budgeted for the I/I study and SSES work.

**e. RFQ upgrade of the de-gritting system**

Gannett-Flaming was selected to evaluate the de-gritting system. We are in negotiations with them to develop the project scope and fee.

**f. Dyke Lane Pump Station Emergency Power and Electrical Upgrade**

This is a storm water pump station maintained by the WPCA for the City. We met with Jim Hricay, OPM Director to discuss funding for the project. The EDA has provided a grant of \$800,000 for construction of the emergency power generator, which is estimated to cost approximately \$1.5 million. Currently the City does not have funding for its share of the cost and the project has been put on hold until next FY.

**9. Replacement of telehandler (Lull).**

Due to lack of available funding the item was withdrawn.

**10. Old Business**

There was no other old business to discuss

**11. New Business**

B Brink presented the committee with the proposed five year capital improvement plan. Some of the large scale projects are the ones discussed above. An enclosure for the rag & grit trailers was not included. A less expensive approach is to connect each trailer to a carbon canister to collect and treat the odors

There being no other issues to discuss Ed Kelly made a motion to adjourn the meeting, seconded by D Capano; motion carried 2-0-0. The meeting was adjourned at 8:05 pm.