



TECHNICAL COMMITTEE MEETING MINUTES

Wednesday July 12, 2017

2nd Floor Conference Room

Building 11, 111 Harbor View Avenue

Stamford CT 06902

5:30 p.m.

Daniel Capano	Chairman, Technical Committee
Edward Kelly	Committee Member (Absent)
Merritt Negin	Committee Member
William Brink	Executive Director, WPCA
William Degnan	Plant Supervisor, WPCA
Robert Pudelka	Assistant 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 June 14, 2017 Technical Committee Meeting Minutes.

M Negin made the motion to approve the minutes of the meeting for June 14, 2017, second by D Capano, motion carried 2-0-0.

3. Fifth Amendment to agreement with Arcadis for additional construction administration services in coordinating and overseeing the additional work being performed by the Systems Integrator as requested by the WPCA. The additional work identified as necessary and was not included in the original scope of services. Fees based on an hourly rate schedule, not to exceed \$15,000.

D Capano asked if ARCADIS had completed the punch list and outstanding items in their contract for deployment of the SCADA Upgrade to which, W Brink answered that they appear to be behind schedule. R Pudelka said that he has forwarded to them a comprehensive list of issues which needs some attention. D Capano would like to have them finish with their contractual obligations before they take on other assignments. The item was held for reconsideration for August meeting.

4. Update on the possible installation of fuel cells by Doosan Fuel Cell America, Inc.

W. Brink provided some additional information from Doosan Fuel Cell which answered some of M Negin's concerns. He said it appears that the WPCA will have to pay for all of the power generated by the fuel cells, even the power that is fed into the grid during low power demand periods. There is also a minimum charge (\$/kWh) that has to be

paid if the rate charged by Eversource and Constellation Energy goes below \$0.05832/kWh. He did not believe that it was cost effective for the fuel cell units to serve as an emergency power source. The power generated cannot support the initial startup current for large sized motors. D Capano did not feel very comfortable with the entire deal with a commitment for 20 years. W Brink said there is not much savings (around \$55,000 per fuel cell) relative to our annual cost for electricity of approximately \$1 million considering the risk involved and commitment to purchase all the power from the fuel cells for 20 years. A big concern of his is what would happen if Doosan went out of business, or the cost of electrical power fell below the minimum purchase price in the next 20 years. M Nesin said he was in favor of using one fuel cell unit as long as the plant's demand always exceeded the fuel cell's production, and the fuel cell could be used to power the UV disinfection. A second concern he has is about the 20 year contract between the SWPCA and Doosan, is if the LREC (Low Emissions Energy Credit) program is eliminated because as it is not in the best interest of Eversource, we still have to purchase 100% of the output of the fuel cells.. He said that since 2013, 4 states have phased out net metering, and in California the electric utilities are proposing that the net metering law be changed. He presented and New York Times, July 9, 2017 article.

W. Brink added that he had a brief conversation with Nancy Pipicelli, Energy Technician at the Engineering Bureau who was not very positive about fuel cells. She suggested changing the light fixtures at the treatment plant to LED lights so that we could realize some immediate power and cost savings. W Brink stated that we would plan on doing that. D Capano agreed.

5. Bid waiver for rehabilitation of one (1) Gravity Belt Thickener by Andritz for \$94,152.

W. Brink said that the rollers and bearings for the gravity belt thickeners and the belt filter presses are wearing and nearing their end of service life. The units are having frequent shutdowns. It is a proprietary item that only Andritz can supply. The \$94,152 is to completely refurbish one (1) gravity belt thickener. With two new rollers and refurbish the existing two rollers that would be utilized on the second unit, There are some costs for site supervision by Andritz personnel. D Capano asked for further clarifications on the details in the proposal. W Degnan said that he would have the details for the committee at the August meeting. The item was held and not voted on.

6. Update on odor control.

W. Brink said that there has not been any odor complains in the recent past. D Capano said that he felt that there was a faint burnt hair odor from the sludge drier.

7. Update on engineering studies and designs,

P Chakravarti presented the status for each of the projects as below:

a. Wedgemere Road Area Sewers.

Cardinal Engineers have submitted the design plans for review. He plans on doing that in the coming days.

b. Perna Lane Area Sewers.

The project is with Stamford EPB for approval.

c. Upgrade of UV disinfection.

Hazen & Sawyer has been working on developing the basis of design report/services.

d. Upgrade of the Raw Sewage Pump Station

Wright Pierce is working on developing the preliminary design report.

e. Upgrade of aeration blowers, modification of aeration basins, dissolved oxygen control, and emergency power generator

Wright Pierce is working on developing the preliminary design report.

f. Infiltration & Inflow study.

Sewer pipe rehabilitation/lining work has been bid out. Bids are due on Sept 6, 2017. W Brink indicated that CDM Smith has developed the preliminary hydraulic model for the sanitary sewer collection system. They did not identify any sewer system capacity or overflows issues based on their preliminary model study. They also identified the areas for the phase I SSES.

8. Update on construction projects,

P Chakravarti presented the status for each of the projects as below:

a. Replacement of primary sludge force mains.

The glass lined pipes and other connections have been delivered. Nac Industries have started excavating to remove the old pipe.

b. Dyke Lane pumping station upgrade.

The construction permits for the generator and the electrical work inside the building have not been issued as yet. Additional landscaping details as requested is being provided

c. Arc Flash –Electrical preventive maintenance.

Two bids for Electrical preventive maintenance were received. The project engineers reviewed the bids and contacted the two firms to discuss the scope of services. Their recommendation is to have the firms visit the site and negotiate the fees. As a municipality we have to re-bid.

d. Flow distribution to the secondary clarifiers and effluent pumps.

C.H. Nickerson has completed concrete base slab and part of the walls for the flow distribution structure.

9. Old Business

There was no old business that was discussed

10. New Business

W Degnan said the bids for procuring sodium hypochlorite will be in on July 20, 2017.

R Pudelka mentioned that for procurement of methanol for denitrification, he has started to include the supplier for Micro-C that has a slightly lesser percentage of methanol. He has done a test run and found that there was no adverse impact on the denitrification process. He expects that there will be some cost savings.

M Nesin made motion to adjourn meeting, second by D Capano, motion carried 2-0-0.
Meeting adjourned at 6:25 pm.