

TECHNICAL COMMITTEE MEETING (REVISED)
Wednesday, April 24, 2013
3rd Floor Conference Room
Plant Site, 111 Harbor View Avenue
5:30 p.m.

Meeting minutes

Attendees:

Dan Capano	Chairman, Technical Committee
Daniel Schwartz	Committee Member
William Brink	Executive Director, WPCA
Prakash. Chakravarti	Supervising Engineer, WPCA
William Degnan	Plant Supervisor, WPCA
Marie Sabo`	Laboratory Director, WPCA

1. Call to order, Pledge and Roll Call:

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

2. Review and approval of previous meeting minutes

D. Capano made the motion to approve the March 27, 2013 Technical Committee meeting minutes, and motion seconded by D. Schwartz. The minutes were approved 2-0-1;

D. Capano also thanked Mr. Donald Rullman, Ex WPCA Board and Technical Committee member for his service to the WPCA and the community. Mr. D Rullman acknowledged the gratitude.

3. Report on Effluent Pumps and UV Disinfection Evaluation by Michael Headd, P.E., Stantec

M. Headd gave the committee a brief narrative of their evaluation of the effluent pumps. He stressed that their findings are that the effluent pumps' 140 HP motors and 180 amp VFDs are under sized for operating the units at full speed (60 hertz). The pump motors can only operate at a maximum of 54 hertz so as not to exceed the rated maximum motor current draw of 200 amps. M. Headd stated that the Stantec study recommends upgrading the effluent pumps' with larger VFDs and motors rated for 300 HP and 170 HP, respectively, which may also need larger diameter pump tube wells and electrical conduit and feed cables. Upgrading the VFD's in advance of the motor upgrade was discussed and the cost/benefit is being studied for possible implementation.

M. Headd stated that with respect to the ultra violet disinfection system Stantec was asked to evaluate the existing system for effective disinfection capabilities of enterococcus bacteria to meet the new limits in the draft NPDES permit. He mentioned that the data collected from Dec, 2012 and Jan, 2013

showed no exceedance of the new permit limits at an average of 15 MGD. The UV system manufacturer Wedeco has reviewed the data and did a model analysis and recommends a third bank of lamps to meet the new limits. M Headd also mentioned that the report outlines the options of adding additional UV banks to the existing system, and the option of a new more efficient UV system without adding new banks and with comparable power usage to the existing system. The estimated capital costs for these improvements will vary with the system selected, but the UV equipment cost alone (not including installation) will range from approximately \$500,000 to \$800,000.

M Sabo mentioned that Wedeco recommends a collimated beam test. She intends to do a stress test of the existing system on May 7th, and 8th 2013 at higher flows. B. Brink mentioned that the design and implementation would take about three years and the State DEEP would like it to be implemented in two years. He will meet with the State.

4. Report on sludge dryer odor control evaluations by Robert Lambalot, Synagro and Jeff Pinnette, P.E., Wright-Pierce

B Brink stated that WPCA and Synagro are in contract negotiations that include jointly improving the odor controls that address the RTO by-pass.

Robert Lambalot, odor control expert with Synagro Corp. informed the Board of the proposed modifications to the bypass stack. They plan on installing a duct from the RTO by-pass to vent through the two activated carbon canisters that Synagro brought from their Bronx plant. He gave a brief description on the proposed ducting and to be implemented.

Jeff Pinnette of Wright-Pierce informed the committee of his findings and recommendations. He mentioned that carbon is most suited for odor absorption of the RTO bypass and has to be replenished about every couple of years. D Capano asked about the time frame to implement the recommendations. R. Lambalot replied it should take about 2-3 months. He mentioned that he is still to work on the dispersion model and look at the potential impact.

5. Report on odor control scrubbers by Jeff Pinnette, P.E., Wright-Pierce

J. Pinnette sorted through the history of the scrubbers and described the findings in his technical report. New peristaltic chemical feed pumps were sized and are on order to replace the diaphragm pumps which were oversized and had deteriorated. The plant currently has two demonstration chemical feed pumps in use.

They have evaluated the existing packed tower scrubbers and identified a number of issues with the installed equipment, including high ventilation rates and excessive pressure on the spray nozzles within the scrubbers. D Capano asked if it was fair to say that the system was oversized. J. Pinnette said they

found the odor control system fan ventilation rates and resulting stack exit velocities to be well in excess of the design limits. He also stated that the recirculation pumps are oversized.

Recommendations are to install a sheave to reduce the fan ventilation rate on the scrubber for the dewatering building which has excessive misting and to throttle the recirculation pumps to reduce the pressure on the spray nozzles. A long term solution would be to add VFD's for control of the fan speeds.

The problems of water carryover into the ductwork of the scrubbers are being addressed. Also the possible relocation of the instrumentation will be studied. It is expected that the packed tower odor control scrubbers will be in full operation with chemical addition once the ordered chemical feed pumps and fan sheave arrive in May.

6. Amendment of sludge dryer operations contract with Synagro to extend contract for 6 months. Discussion and vote.

B. Brink mentioned that the City Ordinance limits extension of contracts to six months with no other changes to the contract. Synagro's contract could be extended to end of August 2013. D. Capano agrees to the extension. D. Schwartz made a motion to extend the contract, seconded by D Capano. Motion was approved 2-0-0

7. Status of RFP for sludge dryer operation

B. Brink mentioned that P. Chakravarti has been working on the RFP and B. Brink is doing the edits. The current Synagro contract will serve as the basis for the RFP and the RFP will be forwarded to the technical committee for review.

8. Windermere community sewage system

B. Brink mentioned that the WPCA has an agreement with the developer of the residential complex consisting of about 26 large single family homes with a community septic system. The developer is required to provide the WPCA with an annual engineering report on the septic system O&M and allow the WPCA to inspect the system. WPCA collects and provides testing of groundwater samples, which do not indicate that there are any problems with the system. WPCA staff will be visiting the Windermere site on Thursday May 9, 2013.

9. Separation of costs for stormwater from WPCA (construction costs and operating cost)

B. Brink mentioned that The WPCA is implementing a Computer Management and Maintenance System which can track labor costs for stormwater pumping stations operation and maintenance. B Degnan will have work orders will be tracking the hours beginning July 1, 2013. The construction costs for storm

sewers and road improvements included in sanitary sewer extension projects will be separated and B. Brink is working on a Memorandum of Agreement for back charges to the City for these costs.

10. Status of capital projects

P. Chakravarti stated that the rehabilitation of the secondary clarifiers and thickeners are almost complete except for some punch list items. He mentioned that the four secondary clarifiers are on line and that B. Degnan has helped the operators with implementing a systematic control of mass balancing through the system. B. Degnan also stated that one of the bearing for one of belt filter press sheared and the rollers have been shipped to Texas for repair.

P. Chakravarti said that four bids were received for construction of Carriage Drive area sewers and the bids had come in over the budget. The bid request has been revised and the four bidders have been asked to re-submit their bids. The revised bids are expected on April 25, 2013.

The Summer Street sewer repairs have been completed except for a lateral repair which will be done soon.

11. Status of RFP for on call engineering services

P. Chakravarti stated that the draft is ready for review and B. Brink is editing the same and will be forwarded to the technical committee for review soon.

12. New Business

There being no new business to discuss D. Capano made a motion to adjourn the meeting, seconded by D Schwartz, motion carried 2-0-0

The meeting was adjourned at 7:24 pm