



STAMFORDWPCA TECHNICAL COMMITTEE MEETING MINUTES

Wednesday 7/14/2021

4:30PM

Via VIDEO/TELECONFERENCE

Attendees:

Merritt Nesin, P.E.	Chairman, Technical Committee
Edward Kelly	Committee Member
Mark McGrath	Committee Member
Steve Bagwin	WPCA Board Member
William Brink, PE	Executive Director, WPCA
Ann Brown, PE	Supervising Engineer, WPCA
Rob Pudelka	Plant Supervisor, WPCA
Steve Pietrzyk	Collection System Supervisor, WPCA
Pete Scorziello	Synagro

1. Call to Order and Roll Call

M. Nesin called the meeting to order at 4:33pm and announced the attendees as listed above.

2. Approval of June 9, 2021 Meeting Minutes

E. Kelly made a motion to approve the minutes of the June 9, 2021 Technical Committee Meeting; seconded by S. Bagwin. Motion carried 4-0-0.

3. Public Comments

None

4. Discussion of Sludge Dryer Air Permit Modification and Stack Test Results

P. Scorziello indicated that a stack test had been completed. The results were very good. The VOC is 10x below permit limit and Destruction Efficiency is 94.9, which is above the permit limit of 85%. Pete explained the calculation for the 7.8 permitted transports per hour. He explained that the total dryer permitted capacity is 25 dry tons per day and the maximum number of transports per hour is limited by the pellet density. If the pellet density is low, they could exceed 7.8 transports per hour without exceeding the permitted capacity of 25 dry tons per day. However, they couldn't demonstrate this at the time of the stack test since the pellet density was high at that time. After some discussion, it was requested that Synagro still pursue a permit modification increasing the number of transports per hour. He agreed to ask their engineer about applying for a permit modification.

5. SWPCA Operations During COVID-19 Pandemic

W. Brink explained that WPCA has 5 employees who are not yet vaccinated. The WPCA is following the Mayor's recent guidelines regarding masks and as of July 12th, everyone is back to work at the facility.

6. Impact of Tropical Storm Elsa on Plant and Collection System

R. Pudelka advised the committee that there was 2.6-inches of rain during Thursday night's thunderstorm and a total of 8.15-inches of rainfall Thursday into Friday. Flows at the plant were above 50MGD. The plant maintained the flow by running the 2 new pumps in the raw sewage pump station and all by-pass pumps at 100%. The plant biological process performed well. The UV system operated the way it was supposed to.

S. Pietrzyk stated that he had 2 crews of mechanics working Thursday and Friday to monitor the pump stations and collection system. The Stamford storm sewer system was designed for a 25 year storm event and this was equivalent to a 50-100 year storm event. The storms flooded many city roads, which allowed rain water to enter the sanitary sewer system. S. Pietrzyk explained the flows seen at the pump stations during the storm and the issues they experienced. He explained that he works with the PMA Group for damage claims from such an event. There are 6 claims so far. E. Kelly asked if we have any control over

Darien and their flows. It was explained that Darien is having an I/I study done. Their flows are mostly limited to their pumping capacity.

7. Update on Force Main Repairs

A. Brown stated that CH Nickerson spent the prior week preparing the 5 pits for Insituform to line the force main. Insituform's sub-contractor was on site to clean the pipe before the lining process started. They cleaned the majority of the pipe prior to the rain event. The rain sent water and mud back into the pipe which had to be removed again. Insituform set up 2 towers for inserting the lining at two pits; Pit #2 outside Solid Waste Building and Pit #5 outside the Primary Sludge Building. To date they have installed liner from Pit #2 toward Pit #1 outside the Raw Sewage Pump and Pit #5 toward Pit #4 outside of the Chemical Building. After the lining is complete, Nickerson will reinstall the 45°bends and a pressure test will be done.

8. Discussion and Approval of CDM Smith's Proposal for GIS Sewer Rehabilitation Tracking and Upgrades

A. Brown explained SWPCA currently has an existing GIS database and application development program which allows WPCA to track information on pump stations, sanitary sewers and laterals regarding inspections and investigations done by WPCA collection system staff. WPCA received a proposal from CDM Smith to enhance that system and make additional information available to the WPCA staff.

S. Pietrzyk explained that there are 250 miles of sanitary sewers and 23 pump stations. This investment is a resource tool that is more than just additional data collection. It will track maintenance related activities at the pump stations such as: the installation of new pumps, electrical work, repair or installing isolation valves. It will provide the user with the locations of sanitary sewer rehabilitation work completed, areas where pipe lining has been done, links to plans, CCTV footage for sewers and laterals. The proposal includes the development of applications which will allow users to capture activities on their WPCA phones. This will save countless hours of investigation. WPCA can be trained to perform future updates to the program. The Technical Committee agreed that this work should move forward.

9. Update on UV Disinfection Treatment System

R. Pudelka indicated that all channels are working. The trial period has ended and all channels rotated correctly during the 30 day trial. The remaining WEDECO system will be removed shortly. The WPCA received the radar unit and will be installing it in one of the channels.

10. Discussion on Plant Operations

R. Pudelka indicated that the plant is running well. Nitrogen levels are low. The plant is using less methanol than previous years. The start-up of Blower #3 was today. The DO controls need a lot of attention. The bypass pumps have been running because of the rain event. There is no screening with the by-pass pumps and he expects the NRCY pumps to clog because of the ragging getting into the system without going through the bar screens.

11. Update on Engineering Studies and Designs

A. Brown provided the board with an update on engineering studies and designs which is attached and made part of these minutes.

- a. Infiltration & Inflow Removal Project
- b. Sludge Degritting System Upgrade
- c. Sludge Management Plan
- d. Plant Water System and the RAS/WAS Pumping Systems

12. Update on Construction Projects

A. Brown provided the board with an update on engineering studies and designs which is attached and made part of these minutes.

- a. Standby Generator for the Greenwich Ave. Pump Station
- b. Preliminary, Secondary and Disinfection Treatment Improvements
- c. Clay Hill Pump Station Generator
- d. Electrical Preventive Maintenance and Arc Flash Evaluation

13. Old Business

14. New Business

There being no further issues to discuss, E. Kelly made a motion to adjourn the meeting, seconded by S. Bagwin; motion carried 4-0-0. The meeting was adjourned at 5:55pm.



**UPDATE OF CAPITAL PROJECTS
TECHNICAL COMMITTEE MEETING
July 14, 2021**

A. Brown presented the following project updates:

1. UPDATE ON ENGINEERING STUDIES AND DESIGNS

a. Infiltration & Inflow Study

The Contractor has finished the CCTV inspection of the service laterals and cleaning and grouting of the service laterals needing repairs. Final payment has been made to the Contractor and this Phase is complete. The next step is to prepare bid documents for lining the larger diameter pipes (30-inch and 48-inch diameter).

b. Sludge Degritting System Upgrade

The plans and specifications are ready for bidding. The project will be advertised in August with bids received in September. This project includes replacing the primary sludge pumps and sludge degritting equipment, as well as the sludge withdrawal piping from the primary settling tanks, with an estimated construction cost of \$4 million.

c. Sludge Management Plan

Hazen held a workshop to introduce the “World of Options” for sludge management. They introduced what technologies are available for sludge processing, what they do, what they produce and pros/cons. The next step is for Hazen to perform a high level structural review of the existing facilities. The results will be incorporated into the report. This is scheduled for later this week.

d. Plant Water, Return Activated Sludge (RAS) and Waste Activated Sludge (WAS)

A firm has been selected for this project based on a review of the four proposals submitted and interviews of each firm held last month. We will begin discussions on the scope and fee so an Agreement can be prepared.

2. UPDATE ON CONSTRUCTION PROJECTS

a. Design-Build Standby Generator for the Greenwich Ave. Pump Station

The contractor received final minor comments back from EPB and Engineering. The comments are down to a few regarding verification of structure elevations and certifications from an engineer required by the Flood Prone Area Regulations of Stamford because the pump station/generator is located in the flood plain. Northeast Generator is addressing these comments.

b. Preliminary, Secondary and Disinfection Treatment Improvements

Construction is ongoing and construction updates are as follows:

42” Force Main:

- Five pits have been excavated for the lining of the 42” force main. The pipe was cleaned this week and Insituform is preparing to begin installation of the liner on Wednesday, 7/14. The second day of installing is Monday 7/19. After this, Nickerson will install the new bends and header piping and restore the areas.

Raw Sewage Pump Station:



- Bar screen #3 is installed. The unit is in operation. We are running with the new bar screen #3 and the old bar screen #2. Bar screen #1 has been installed in the building but, is not yet operational.
- Two of the five new RSPS pumps are in operation. The remaining three pumps are installed but, not connected. Piping and associated vales, etc. are being installed now.

Aeration/Blower Building:

- Two new blowers are operating. The block wall has been installed. The third blower is installed but not yet running.
- Three sound attenuators, one for each blower, have been installed outside the building.

UV System:

The TROJAN system is in place in three channels. These are operating without major issues.

c. Clay Hill Pump Station Generator

The generator pad has been installed. The next step is for the WPCA to purchase a generator for this site.

d. Electrical Preventive Maintenance / Arc Flash

Siemens has one building to complete the electrical preventive maintenance. This is the operations building and this work will require shut downs that need to be coordinated with the contractor work. It will be scheduled for later in the summer. The information will be provided to Tighe & Bond for the Arc Flash Study to be prepared.

Change Order Log as of 7-14-21

Copy of Change Order log for construction projects attached. The Preliminary, Secondary and Disinfection Treatment Improvements will be updated for the next meeting. The value of Change Orders for Capital projects to date is as follows:

Preliminary, Secondary and Disinfection Treatment Improvements (Contractor – CH Nickerson)

Original Value of Contract = \$ 26,751,500.00
Total Approved CO Amount = \$ 715,274.94
Contract Sum to Date = \$ 27,466,774.94
Percent of total project = 2.70%

Biosolids Dryer System Selective Demolition (Contractor – A Secondino & Son)

Original Value of Contract = \$1,365,121.00
Total Approved CO Amount = \$ 143,633.16
Contract Sum to Date = \$ 1,508,754.16
Percent of total project = 10.5%

Electrical Preventive Maintenance (Contractor – Siemens)

Original Value of Contract = \$ 95,732.00
Total Approved CO Amount = \$ 7,854.00
Contract Sum to Date = \$103,586.00
Percent of total project = 8.2%

Stamford WPCF Preliminary, Secondary and Disinfection Treatment Improvements
Change Order Summary

CHN PCCOR No.	CHN PCCOR Date	Description	PCO								RFI		RFP		WCD	
			Contractor Amount	Status	Included in CO#	Total Approved Amount	Approved to Preliminary	Approved to Secondary	Approved to UV	Approved Date	No.	Date Issued	No.	Date Issued	No.	Date Issued
NA	NA	Replace the Issue for Bidding Specification Sections 00520 - Agreement and 00800 - Supplementary Conditions with the Attached Specifications	\$ -	Approved	1	\$ -					5/10/2019					
01 (rev)	6/21/2019	Programming Services Provider / Integration Services - Revised	\$ 194,922.00	Approved	2	\$ 194,922.00	\$ 48,340.00	\$ 110,000.00	\$ 36,582.00		7/9/2019					
02 (rev)	1/20/2020	Additional Plank Support Framing & Planking at UV Basin 1 Outfall	\$ 35,257.23	Approved	3	\$ 35,257.23			\$ 35,257.23		2/27/2020			H-01	11/19/2019	
03 (rev)	10/25/2020	Changes to Moment Connection at UV Canopy	\$ 4,076.36	Approved	3	\$ 4,076.36			\$ 4,076.36		12/12/2019	H-019				
05	11/18/2019	UV Pilasters	\$ 2,689.46	Approved	3	\$ 2,689.46			\$ 2,689.46		11/19/2019					
09	1/28/2020	Remove and Reinstal drain piping and electrical conduionboxes in Blower Room to install new fire rated wall. Plans did not call for this work	\$ 28,473.69	Approved	3	\$ 28,473.69		\$ 28,473.69			4/7/2020				W-06	11/20/2019
11	2/21/2020	Add spool pipe to Septage Area	\$ 1,214.84	Approved	3	\$ 1,214.84	\$ 1,214.84				2/27/2020				W-03	11/20/2019
13	3/9/2020	Additional Rebar at UV Basin 1	\$ 21,447.91	Approved	3	\$ 21,447.91			\$ 21,447.91		3/15/2020				H-01	12/18/2019
17	4/14/2020	UV Power Panel Relocation	\$ 23,740.56	Approved	3	\$ 23,740.56			\$ 23,740.56			H-095	4/8/2020			
14	3/18/2020	Relocate Generator and Modify Bridge Crane per Building Department Request	\$ 83,080.40	Approved	4	\$ 83,080.40		\$ 83,080.40			8/19/2020					
18	6/19/2020	Replace Missing Hardware @ AT Bridges	\$ 5,082.33	Approved	4	\$ 5,082.33		\$ 5,082.33			8/19/2020					
19	7/14/2020	Provide Additional Thin Client Licensing & Integrate Existing Mixers per City Request	\$ 23,618.32	Approved	4	\$ 23,618.32		\$ 23,618.32								
16	4/4/2020	Credit for Redundant Breaker @ ATS	\$ (17,296.74)	Approved	5	\$ (17,296.74)		\$ (17,296.74)			9/23/2020					
21	8/7/2020	Add External Breaker for RSP-2	\$ 9,061.48	Approved	5	\$ 9,061.48	\$ 9,061.48				9/23/2020					
24	8/26/2020	Additional Tags for The GE Historian	\$ 8,590.02	Approved	5	\$ 8,590.02	\$ 2,863.34	\$ 2,863.34	\$ 2,863.34		8/26/2020	H-164	8/19/2020			
25	9/14/2020	Replace UV Channel #3 Inlet Gate	\$ 37,004.86	Approved	5	\$ 37,004.86			\$ 37,004.86		9/15/2020			H-02	9/3/2020	
27	9/15/2020	Install Missing Wiring to MX 60-6 & 60-12	\$ 16,235.90	Approved	5	\$ 16,235.90		\$ 16,235.90			9/23/2020					
28	9/15/2020	New Sampler Location at UV	\$ 5,232.89	Approved	5	\$ 5,232.89			\$ 5,232.89		9/17/2020	H-154	9/8/2020			

Stamford WPCF Preliminary, Secondary and Disinfection Treatment Improvements
Change Order Summary

29	9/22/2020	Replace Missing WML support rods in Aeration tank 1-4E/4W	\$ 4,869.75	Approved	5	\$ 4,869.75		\$ 4,869.75		9/23/2020						
31	9/22/2020	Test Soils for City Storage tent	\$ 1,525.86	Approved	5	\$ 1,525.86		\$ 1,525.86		9/23/2020						
20	8/21/2020	Cut Sumps in Aeration Tank Floors	\$ 37,083.78	Approved	6	\$ 37,083.78		\$ 37,083.78		10/5/2020						
30	9/22/2020	Add Cable Tray and Bus Supports	\$ 57,017.98	Approved	6	\$ 57,017.98		\$ 57,017.98				12/2/2020				
33	10/2/2020	Replace Failing Straub Coupling (Existing)	\$ 5,513.98	Approved	6	\$ 5,513.98		\$ 5,513.98								
40	11/2/2020	Add Supports to Existing Pipe in Blower room	\$ 16,024.43	Approved	6	\$ 16,024.43		\$ 16,024.43		11/11/2020						
36	10/28/2020	Paint UV Steel Walkway at Basins 1 & 2 - Option 1	\$ 12,145.53	Approved	6	\$ 12,145.53		\$ 12,145.53		12/2/2020						
15	3/18/2020	Reroute roof drain from Screenings Building as required by the Stamford Building Department. Approved materials only. Labor to high so going T&M	\$ 6,912.20	Partial Approval	TBD	TBD	TBD			4/7/2020						W-01
23	4/24/2020	Replace Cables for Gates Not Shown on Contract Drawing	\$ 5,893.78	Revisions Required					TBD							
37 (rev)	12/8/2020	Trench Cover at Spare Parts Building	\$ 25,055.44	Approved	7	\$ 25,055.44		\$ 25,055.44		1/21/2021				H-03	10/5/2020	
41 (rev)	12/8/2020	Canopy Extension and Davit Crane	\$ 36,975.66	Approved	7	\$ 36,975.66		\$ 36,975.66		1/21/2021				H-05	10/22/2020	
42 (rev)	12/8/2020	Maintenance Access at UV Electrode Sensors	\$ 16,475.43	Approved	7	\$ 16,475.43		\$ 16,475.43		1/21/2021	RFI-159	8/4/2020				
43	12/17/2020	Increase Conduit Size to CP-11	\$ 1,191.24	Approved	7	\$ 1,191.24		\$ 1,191.24		1/21/2021						
44	12/22/2020	Electrical Power in Spare Parts Building	\$ 13,554.20	Approved	7	\$ 13,554.20		\$ 13,554.20		1/21/2021				H-04	10/22/2020	
45	1/11/2020	Relocate Conduit around new door 101c	\$ 5,410.15	Approved	7	\$ 5,410.15		\$ 5,410.15		1/21/2021						
	12/21/2021	Time Extension of 119 calendar days due to unforeseen underground conditions		Approved	8					3/5/2021						
48	1/21/2021	Provide Bearing Cooling Water to Influent Pumps	\$ 16,267.28	Approved	8	\$ 16,267.28	\$ 16,267.28			3/5/2021						
49	1/29/2021	Unforeseen Conditions at Headworks Excavation	\$ 19,244.40	Approved	8	\$ 19,244.40	\$ 19,244.40			3/5/2021						
					Total	\$ 715,274.94	\$ 61,479.66	\$ 374,093.02	\$ 279,702.26							

