

**WATER POLLUTION CONTROL AUTHORITY
REGULAR MEETING
JANUARY 20, 2011**

Chairman Merancy called the Regular Meeting to order at 6:05 PM with the following in attendance:

MEMBERS:

Ronald Merancy, Chairman
Pat Mallane
Catherine Aresta, Secretary
Attorney Fitzpatrick

OTHERS:

James Stewart, Dir of Public Works
Debbie Lichwalla, Secretary
John Batorski, Veolia Water
Attorney Hess - Arrived at 6:40 PM

ABSENT: Rimas Balsys, Vice Chairman
Steven Cote

1. **Ronald Merancy opened the meeting with the Pledge of Allegiance.**
2. **Motion to vote for discussion/decision regarding the Chemtura Building and Treatment Plant Easement.**

VOTED: Unanimously on a motion by Pat Mallane and seconded by Catherine Aresta to enter into discussion /decision on Chemtura.

Attorney Fitzpatrick entered into a discussion on the Discharge and Access Agreement regarding the rights and obligations to conveyance, acceptance, treatment and disposal of wastewater and sludge from CMCI's property at 280 Elm Street, Naugatuck, CT.

Attorney Fitzpatrick stated that the current agreement expires in 2021.

3. **Commission discussion/decision concerning Odor NOV.**
 - A. Consent Odor 2048 Update – November / December.
 - B. Commission reviewed a letter from the DEP requesting to submit a letter of Approval to the DEP from the Commission.

4. **Acceptance of Meeting Minutes for November 18, 2010.**

VOTED: Unanimously on a motion by Pat Mallane and seconded by Catherine Aresta to **ACCEPT** November 18, 2010 meeting minutes.

5. **Correspondence.**

Discussion on a Letter from ARI regarding the Status of the Proposed Rule under 40 CFR Part 60 Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Sewage Sludge Incineration Units

6. Veolia Water

- A. Summary of WWTF Operations – November and December
- B. Fourth Quarter 2010 – CEMS Cylinder Gas & Opacity Audit Report 2010
- C. Discussion regarding a potential rebate for the Borough on a Nitrogen Credit for an estimated amount of \$38,000.00 payable in July/August 2011.
- D. Discussion regarding odor complaints during the months of November and December.

This report summarizes the activities at the Borough POTW for November 2010:

- 1. **Highlights and Significant Issues:**
The plant met all NPDES effluent limits. Please see the attached reports for additional performance details.
- 2. **Collection System Update:**
Please see attached Collections Report.
- 3. **Plant Performance Summary:**
Please see the attached reports for additional performance details.

Plant Process Data	Limit	Actual
Total Suspended Solids (mg/l)		
Influent Avg.	-	371
Effluent Avg.	30	5
Removal Efficiency	85%	99%

Plant Process Data*	Limit	Actual
Carbonaceous BOD		
Influent Avg.	-	167
Effluent Avg.	30	4
Removal Efficiency	85%	98%

	Oxford	OTR	Naugatuck	Middlebury
Oct Flow Avg. (MGD)			3.9	0.503
Sludge Liquid Total (MGal)				0.087
3.86				
Sludge Cake Total (Dry Tons)				
6.51				
Septage Total (MGal)			99,750	40,250
658,200				164,750

Discharge Permit Exceedance: None to report.

Safety Incidents and Odor Complaints

	Month	YTD
Recordable Accidents	0	0
Lost Time Accidents	0	0
Odor Complaints	1	54
Unconfirmed Odor Complaints	0	12

Compliance & Regulatory Issues

1. Wright Pierce delivered three copies of their preliminary odor improvement bid package November 30. Two copies were given to the Borough that same day. One copy is on file at the plant.
2. On Friday November 5, 2010 a meeting was held at the plant with DEP officials, town officials and plant management. Issues discussed included odors, new permit and plant upgrade.
3. The annual stack test and CEMS RATA was tentatively scheduled for December 7 through 9, 2010. CK Environmental prepared the required ITT form by Oct. 1, for submission to CTDEP. The RATA test was moved up and completed/passed on Oct. 29, 2010 as a result on NOV 16633 from CTDEP. The stack test will take place Wednesday, Dec 8. 2010.
4. There was 1 odor complaint during the month of November from north of the plant.

Personnel

1. An employee requisition was submitted for a Maintenance Mechanic position for 2011. The position is approved in next year's budget. We hope to start the mechanic 1/3/2011.
2. Negotiations started on Oct. 21 with the Teamsters on a new contract. Mike Schnack is leading the discussions. A second meeting took place on scheduled for Oct 29; a third meeting is schedule for Dec. 14 at 10 AM.
3. The Office Manager position is slowly being finalized through HR. The goal is to have the temporary position permanent by the end of the year.

Health & Safety

1. There were no recordable safety related incidents in November.
2. The Respirator Plan is 95% complete. The SPCC Plan is complete. MSDS booklet update is complete. The Emergency plan is 70% complete. All safety programs remain under review.

Operational Information

1. Monthly operator training: J-Spin training with all operators.1 hour.
2. On November 2, 2010 United Alarms, Schmidt Electric and collections crew went to every pump station to check all alarms. During a recent heavy rain and wind event, a tree fell and knocked down the electric lines that fed a pump station. The alarm system worked, the generator started and staff responded to find all systems operating.
3. November 7th to November 19th Chris Makuch went to Manager's training Camp in Chicago.

4. The dome for Thickener tank #2 has been installed. The thickener was completely rebuilt. To include new weirs, new rakes, concrete repairs, new electrical, and a fresh coat of epoxy paint.
5. Aeration Blower D failed. That blower is an original blower dating to the early 1990's. Several of the blower silencers have failed, thus the noise at times is excessive. Jenn Muir states we should hear shortly from CL&P regarding our application for the funding of the new blowers. A set of new silencers was purchased for approximately \$15,000.
6. SCADA control of the chemical scrubbers is complete. This project included new chemical metering pumps and control logic.
7. A package is ready to submit to CTDEP for reimbursement of approximately \$28,000 for ammonia probes used in the BNR system pending receipt/installation. Orders have been placed for the equipment which is due in 4 to 6 weeks.

Maintenance

1. Both centrifuges are now operational and all accessory equipment is installed or repaired and operational as well.
 2. New tarp covers were finished on both primary tanks this month.
 3. Raw sewage pump 2 had a leaking seal and is being repaired. RSP #1 was completely rebuilt and installed. Rags are an on going problem here for our RSP's a couple heavy rainfalls have washed all rags into our wet well where we then remove them from pumps again and again.
 4. The ash drain line for the FBI venturi scrubber was replaced from the scrubber through the basement. CPVC pipe was used in place of the urethane pipe that was being used. The north ash lagoon is now back online. G&L is finished emptying the south lagoon.
 5. The north ash pump has been replaced with a rebuilt one. The one taken out will be rebuilt and will replace the south ash pump.
 6. Spirac conveyors have been repaired.
 7. A local machine shop is quoting building a new set of augers for the Abel pumps, OEM augers are about \$20,000 and take 20 weeks for delivery. The shop quoting has experience making augers for Schwing pumps.
8. Clarifiers
- a. The new parts for the primary cross collectors arrived (~\$16,500) and were installed the last week of October in tank #1. The chain and sprockets were completely worn and would have failed again within weeks if kept in service. Parts are being ordered for clarifier #2 to replace the wooden flights and worn out drive sprockets and chain.
 - b. New drive sprockets and chain were installed on secondary clarifier #3. New parts have been ordered for #1 and #2 to replace the worn out sprockets and chain.

Client / Merchant Customer Issues

1. Work continues with the completion of the CRRP section of the annual reports to the Borough.
2. The letter detailing the required repairs to the primary tank drains (uncontrollable circumstance) that was presented to the WPCA Board on

May 20, 2010 was discussed at the September Board meeting. ARI recommended a cost benefit analysis be performed for the project estimated to cost approximately \$50,000. I will start to work on that request.

3. A letter was sent to CTDEP regarding status of odor control projects.

Capital Projects

1. To date, no new information is available regarding the funding available for the aeration system blowers.
2. The #2 Thickener dome project is complete.
3. CTDEP approved the installation of ammonia probes for a price of approximately \$28,000. Naugatuck was the first of 8 facilities selected for this system.

This report summarizes the activities at the Borough POTW for December 2010:

1. Highlights and Significant Issues:

The plant met all NPDES effluent limits. There will most likely be a nitrogen credit rebate. A copy of the estimated rebate (~\$37,087) which assumes a credit cost of \$5.00 is attached for reference. Please see the attached reports for additional performance details.

2. Collection System Update:

Please see attached Collections Report.

3. Plant Performance Summary:

Please see the attached reports for additional performance details.

Plant Process Data	Limit	Actual
Total Suspended Solids (mg/l)		
Influent Avg.	-	153
Effluent Avg.	30	6
Removal Efficiency	85%	96%
Plant Process Data*	Limit	Actual
Carbonaceous BOD		
Influent Avg.	-	95
Effluent Avg.	30	4
Removal Efficiency	85%	96%

	Oxford	OTR	Naugatuck	Middlebury
Oct Flow Avg. (MGD)			5.6	0.739
Sludge Liquid Total (MGal)				*
3.88				
Sludge Cake Total (Dry Tons)				
5.052				
Septage Total (MGal)			103,250	16,000
536,500				121,700

* Not available at time of report.

Discharge Permit Exceedance: None to report.

Safety Incidents and Odor Complaints

	Month	YTD
Recordable Accidents	0	0
Lost Time Accidents	0	0
Odor Complaints	3	57
Unconfirmed Odor Complaints	3	15

Compliance & Regulatory Issues

5. On Wednesday, Dec 22, 2010 a meeting was held to discuss common ground between Veolia and the Borough regarding: odor cost issues, revenue sharing, new permit requirements, facility planning, mercury control issues, and plant upgrade. Atty Ned Fitzpatrick, Atty Hess and another Atty from Middlebury represented the Borough, Atty's Jeff Levy, Mark Zimmerman and plant manager John Batorski represented Veolia. Next meeting is scheduled for Jan 21, 2011 at 11:30 AM.
6. The annual stack test took place Wednesday, Dec 8, 2010. Quarterly CGA's and Opacity Audits took place the week of December 20, 2010.
7. There were 3 odor complaints during the month of December from south of the plant. The odor complaints were not confirmed: the outdoor temperature was 32 F, all plant processes normal and no cake trucks were unloading, thus it is difficult to positively ascertain the source.
8. Mark Zimmerman sent a final status letter detailing ongoing 2010 odor improvements to CTDEP (copy attached).

Personnel

4. We are receiving applications for an additional/approved Maintenance Mechanic position to start in 2011. Interviews will be held in January 2011, with the goal of starting the new mechanic by Feb 1, 2011.
5. Mr. Ciccone (who has a CT OIT wastewater certificate) was hired to replace Nelson Bailey who was transferred to the Seymour facility. Mr. Ciccone started on December 21, 2010.
6. Negotiations started on Oct. 21 with the Teamsters on a new contract with Mike Schnack leading the discussions. Meetings took place for Oct 29 and Dec. 14. The next meeting is scheduled for Jan 12, 2011.
7. The Office Manager position is now filled by Debbie Camp, effective December 20, 2010.

Health & Safety

3. There were no recordable safety related incidents in December. The Safety/Holiday luncheon was held at the plant on December 21, 2010.
4. The Respirator Plan is 95% complete. The SPCC Plan is complete. MSDS booklet update is complete. The Emergency plan is 70% complete. All safety programs remain under review. SPCC training was held December 14, 2010. All personnel received formal training on the updated plan.

Operational Information

1. Monthly operator training: On December 14th David Horowitz from Tighe & Bond presented 2 hour sessions on SPCC training for all employees.
2. Sunday December 5th a noise complaint was received by operations. Steve Rimbkus, a resident on Cherry St, called the police department and threatened to call the mayor. The silencers on two of the four blowers have failed. Two new sets of silencers have been ordered (~\$15,000).
3. December 1st, Collections was called in for a response to a loss of power alarm at Inwood pump station. Upon arrival they noticed CL&P working on a downed power line and the pump station generator was running. They check everything at the station and all seemed well. The alarms seem to be working up to satisfaction.
5. On December 7th UGAM on site for four days to CCTV lines in town.
6. December 8th we had our annual stack test.
7. December 15 through December 17, 2010, Ted Jensen (Collections) and John Carpentier (Maintenance) attended a three day Collections Certification Course.
8. A backup camera was installed for the vactor truck (~\$1000).
9. Aeration tanks #1, #2, and #3 were out of service to repair an air leak that was caused by a baffle curtain mount that failed. Aeration Tank #5 will be removed from service to repair a leaking diffuser cover the first week of January.
10. Ash hauling continues. The north lagoon has been placed in service for the winter months
11. The ID fan drive motor was scheduled to be replaced January 3 as a result of vibration testing indicating the motor bearings were getting worse (~\$15,000).
12. SCADA PID control of the chemical scrubbers (sodium hypochlorite and sodium hydroxide) and incinerator tray caustic feed control is complete. A logic statement was placed in the SCADA system to automatically turn on/off the caustic feed pump for the tray scrubber.
13. A package was submitted to CTDEP for approximately \$28,000 of ammonia probes for the BNR system. Per the Nitrogen Credit Trading program, we have been approved to be reimbursed for this expense upon installation of the package. Installation is schedule for late January 2011.
14. There was a backup reported at 27 Ward, caused by a failure of the potable water line. Our crews responded and concluded that potable water line was the likely culprit and they notified CT Water. CT Water responded and shut off the potable water, which confirmed that the failure of the coupling threads on the potable water line was the root cause. Per CT Water, that type of failure is common. The 20 ft sections of potable water pipe are connected with a brass coupling. The threads on the pipe failed at the coupling and the line began to leak. The potable water leak was directed right at their sewer lateral joint. The force of the leak caused several joints to fail on the sewer lateral. When the joints failed, the potable water washed soil, rocks etc into the lateral. The potable water leak, rocks/soil caused the sewer lateral to back up. The potable water line

was repaired by G&L per CT Water's direction (CT Water will pay for the repair cost). G&L also repaired the damage to the sewer lateral, at the request of CT Water.

15. On December 21, bricks somehow got into the cake sludge receiving bin. We were not able to identify the cake load that brought the bricks to the facility. The bricks damaged a shaft less screw liner, broke the shaft less screw that feeds the silo, damaged rakes/plows in the thermal dryer, and damaged the Abel sludge feed housing (it will require replacement). About 2 wheelbarrows of bricks were removed from plant equipment. As a result of this problem (which has occurred many times in the past), we will install a fixed mount camera that will record the cake loads as they are dumped into the bin. The existing camera does not show the receiving bin and truck as it unloads. In addition, we will install a classifier type shaft less screw feeder that will capture foreign objects greater than 2 inch diameter, and deposit them into a container. The sludge would fall through a series of two inch diameter holes that would line the shaft less conveyor trough. Objects greater than two inch diameter would be transported into a bin.

Maintenance

1. Raw sewage pumps were a considerable nuisance this month. Increased flows have brought in many rags and grit which as always cause havoc with our pumps. #1 pump was completely rebuilt, a seal had to be replaced on #4 pumps and #2 is awaiting a seal to be replaced on arrival. All 4 pumps were shut down a number of times for deragging. We are pricing the installation of a manually cleaned bar rack, rag container, and crane to lift the collected rags from the wet well area.
2. Parts have been ordered to replace worn out cross collector on tank #2, as well as drive chains and sprockets for both tanks (~\$15,000). Installation should begin next month.
3. Another aeration blower, D, failed and was taken out of service. Silencers for these blowers have also become a problem with many cracking or blowing holes in them. New silencers have been ordered and will be installed on A and B blowers when they arrive. New ammonia probes are to be installed on tanks 3 & 6 next month.
4. This seems to be the month for problems with wasting pumps for the secondary tanks. One pump #3 has been rebuilt and installed. We are waiting on parts to rebuild the other two pumps that are in
5. Parshall Flume building has bad heaters which will be replaced next month.
6. The South Plant water pump has been diagnosed with worn motor bearings and will be replaced as soon as a new one gets here.
7. We experienced many problems on Spirac conveyors this month two screws broke at once on CCC1 and CCC2 and were welded back together (no cause was determined). SDC2 also broke a screw when a liner from another conveyor was broken loose and jammed it. We are getting pricing and availability on spares for these conveyors so that timely repairs can be made.
8. The TDU swallowed a bucket of bricks and rocks causing a day long outage, breaking off several rakes and plows.

9. We rebuilt the augers and poppets on the North Abel Pump. The South Abel pump also swallowed a brick and blew a hole in the side of the auger drop box. Temporary repairs have been made until we can decide on the best course of action for repairs. The South also needs some poppet work and parts have been ordered.
10. Final piping and pump installation for chemical feed pumps has been completed eliminating any further need for chemical day tanks.
11. Operation of the Oracle OWAM system continues to evolve tracking all maintenance work and purchasing.
12. A new maintenance mechanic will be hired in January/February and will help us out immensely to keep up with our maintenance program.
- 13.

Reliability Engineer Report

1. Centrifuges
 - a. Both the North and the South centrifuges are running well.
 - b. The scroll from Process Solutions has been sent to Centrisys for repair. The cylindrical section tiles will be replaced with Centrisys supplied tiles since these are much cheaper than the OEM tiles and the same as what is already installed on the conical section. The scroll is expected to be repaired and returned by the end of January.
 - c. The hydraulic motor is presently at Process Solutions for warranty repair.
2. Condition Monitoring / Reliability
 - a. The December vibration route found the ID Fan motor bearing vibration has worsened. An outer race fault has developed and the motor will be exchanged with the spare the first January 3, 2011.
3. OWAM
 - a. The CMMS system is progressing with more work orders being generated. Dennis Roberts is entering work orders in the system as well as ordering parts from the system. We are continuing to update the work instruction accuracy, combining work orders to reduce the paperwork load and implementing better work flows for the maintenance department. This is about 80% complete.
 - b. To date we have entered 77 purchase orders through OWAM.
 - c. The stock codes for inventory items are continuing to be slowly added as parts are ordered as well as inventory levels added to make reordering easier.
 - d. Bills of materials for the plant assets are being updated in OWAM to make parts selection easier when issuing work orders as well as ensuring the correct parts are on hand. The ID Fan, centrifuges, Raw Sewage Pumps, WAS pumps and ash pumps are complete; the rest of the plant equipment is being completed based on criticality and as repairs are being completed. This is about 25% complete.
 - e. OWAM is installed on a computer in the control room to allow operations to enter work requests through the system instead of using hand written forms. Training of how to use the system will begin the beginning of January.
 - f. Equipment is being labeled with asset numbers and asset names harmonized (converting to 1, 2, 3, etc and eliminating North, South, A, B, etc as equipment numbers) to make identifying the proper equipment easier for maintenance and operations work orders.
4. Aeration Blowers

- a. Silencers on two blowers have failed and cannot be repaired any longer. Two new sets of silencers have been ordered due to noise complaints and since it is unknown when the turbo blowers will be approved. These silencers will be installed on the blowers that will remain as backups once the turbo blowers are installed.
5. Aeration Tanks
- a. The submersible recirculation pumps continue to fail. #3A failed after a few months of operation after the last repair. This time the circuit board in the junction box failed. The pump is at AEM waiting on a replacement board.
 - b. The replacement pump we had onsite and placed in the 3A position caused a VFD trip on overvoltage. Investigation of the problem discovered the socket in the 3A position was wired differently than position 3B and resulted in a direct short to ground. The socket was rewired so all are consistent to avoid this problem in the future.
6. WAS Pumps
- a. Three of the WAS transfer pumps are in need of repair, currently #4 and #3 are being repaired and #2 will be repaired once these are complete.
 - b. The Reeves drives (>30 years old) on all of the units require repairs to allow for variable speed, but due to the cost of the parts, it is more economical to install a fixed speed gearbox and motor and run the pumps at 100 gpm until the pumps are replaced during the plant upgrade. The gearbox and motor have been quoted and we are planning on installing these in 2011.

Client / Merchant Customer Issues

- 4. Work continues with the completion of the CRRP section of the annual reports to the Borough.
- 5. The letter detailing the required repairs to the primary tank drains (uncontrollable circumstance) that was presented to the WPCA Board on May 20, 2010 was discussed at the September Board meeting. ARI recommended a cost benefit analysis be performed for the project estimated to cost approximately \$50,000. I continue to work on this request as time permits. Veolia will reimburse the Borough the cost of the proposed tank and installation cost of the proposed tank to capture rocks from the septic. Details will follow in a memo.

Capital Projects

- 4. No new information is available regarding the funding available for the aeration system blowers. Jen Muir has completed her evaluation and a letter has been sent to the local utility in August 22, 2010. The week of September 27, the utility requested and received additional information. We had hoped to get the amount of available funding sooner to avoid the silencer and blower rebuild expenses.
- 5. The #2 Thickener dome project is basically complete.
- 6. CTDEP approved the installation of ammonia probes for a price of approximately \$28,000. Naugatuck was the first of 8 facilities selected for this system. Installation is scheduled to start the first week of January 2011 as the probes arrived before Christmas.

7. VOTED: Unanimously on a motion by Pat Mallane and seconded by Catherine Aresta on a motion to enter into Executive Session at 6:45 PM

8. Executive Session with Borough Attorney Fitzpatrick and Borough Attorney Hess regarding Middlebury negotiations and Veolia negotiations.

VOTED: Unanimously on a motion by Pat Mallane and seconded by Catherine Aresta to **ADJOURN** Executive Session at 7:24 PM.

9. Adjournment

VOTED: Unanimously on a motion by Pat Mallane and seconded by Catherine Aresta to **ADJOURN** the meeting at 7:25 PM.

Attest: Catherine Aresta, Secretary