

**MEETING OF THE ORLEANS  
BOARD OF WATER/SEWER COMMISSIONERS**

**January 6, 2010**

**10 MAY 28 PM 4:04**

A meeting of the Board of Water and Sewer Commissioners was held Wednesday, January 6, 2009 in the Nauset Room, Town Hall:

Those present were Kenneth McKusick, Judith Bruce, Robert Rich, Ann Hodgkinson and Jimmy Dishner of the Board, associate members Ken Rowell and Leonard Short, Ed Barr, Finance Committee liaison, Lou Briganti, Water Superintendent.

Kenneth McKusick called the Board of Water and Sewer Commissioners meeting to order at 1:30 p.m.

**MINUTES**

**Jimmy Dishner made a motion seconded by Judith Bruce to approve the minutes of the meeting of December 2, 2009 as amended. The vote by the Board was 5-0-0.**

**SUPERINTENDENT'S REPORT**

**SEE ATTACHED**

**2011 BUDGET**

The Board of Water and Sewer Commissioners commended the Superintendent and his staff for budgeting year after year with little to no dollar change yet service to the customers has remained constant.

**OLD BUSINESS**

**WASTEWATER**

A motion was made by Robert Rich seconded by Leonard Short to form a sub-committee of the Board of Water and Sewer Commissioners to review the rules and regulations for water and sewer from Barnstable, Chatham and Provincetown and take the best from each to form draft policies for review by the entire Board. The vote by the Board was 5-0-0.

**NEW BUSINESS**

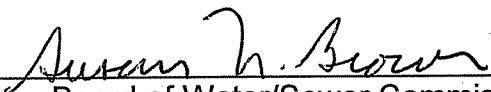
**COMMITMENTS/ABATEMENTS/REFUNDS**

**A motion was made by Robert Rich seconded by Judith Bruce to commit for the month of December 2009 to rate \$0.00, to services \$2,920.00, to usage \$0.00, to installations \$0.00 and to added billing \$0.00. The vote by the Board was 5-0-0.**

**ADJOURNMENT**

**At 2:55 p.m., a motion was made by Jimmy Dishner and seconded by Ann Hodgkinson to adjourn the meeting. The vote by the Board was 5-0-0.**

The next regular meeting is scheduled for January 20, 2010 at 1:30 p.m.

  
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Secretary, Board of Water/Sewer Commissioners

**Board of Water & Sewer Commissioners**

**06JAN2010**

**Budget FY11**

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The review of the FY11 budget with the Town Administrator and Director of Finance was completed on 12/08. There were no significant changes to the budget that was submitted – only a 10K reduction in the electric account based on past usage.

The detailed budget is included in the Board's packet.

*The draft-FY11 budget is complete and was submitted to the Town Administrator on Nov. 18<sup>th</sup>. Budget reviews will be scheduled in the near future.*

*The FY11 budget preparation package has been distributed and was discussed at a Managers Meeting on October 23<sup>rd</sup>. The budget message emphasizes sustainable cuts. Completed budgets are due back to the Town Administrator by November 20<sup>th</sup>.*

**New Emergency Response Regulations**

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The Emergency Response Plan Compliance Checklist (4 pages & 30 questions) was submitted to MA DEP on 12/29 in compliance with the December 31<sup>st</sup> deadline. Twenty SOP's were written in order to be able to complete the Checklist. These SOP's were added to our Emergency Response Plan (ERP) as Appendix I.

Most Departments have hired consultants to complete this work and recently Mass. Rural Water Association (MRWA) has offered to provide assistance with ERP's. We plan to take advantage of the excellent pricing and request that MRWA review our entire ERP from DEP's perspective.

We have a very good ERP which can perhaps become superior with MRWA's assistance.

*MA DEP is requiring that all purveyors sign and submit an Emergency Response Plan Compliance Checklist by December 31<sup>st</sup>. This is a 4-page document with 27 specific questions about the contents of the emergency response plan that all are required to prepare and maintain. The checklist fully references all of DEP's requirements and guidelines for a plan.*

**GWR**

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Additional *Form D* was completed for Facility no. 1 and Well no. 7. Both were submitted to MA DEP in letters dated December 9, 2009.

For each facility, *Form D* and the supportive data were presented for upgraded facilities (not the facilities as they exist today). This was done to take advantage of the current process in the hopes that we could get an engineer to certify (stamp) the documents – and we did. If MA DEP

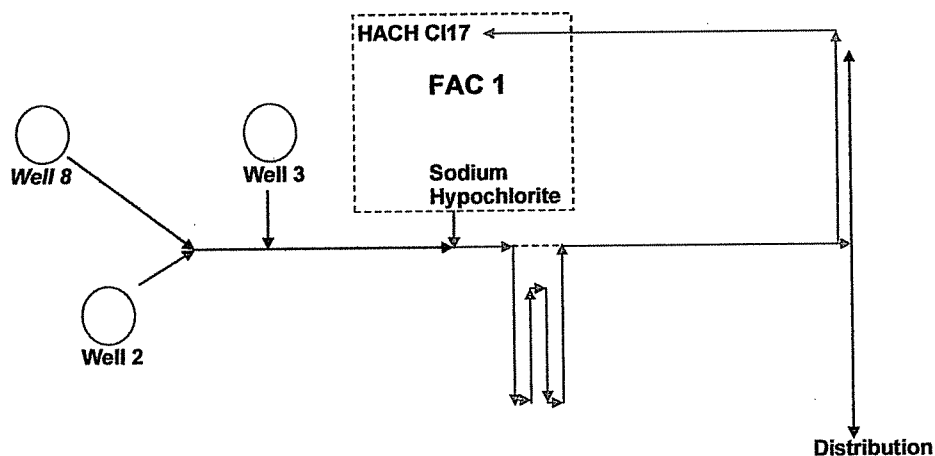
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approves these *Form D*'s then we will achieve 4-log certification for each facility, pending the upgrades.

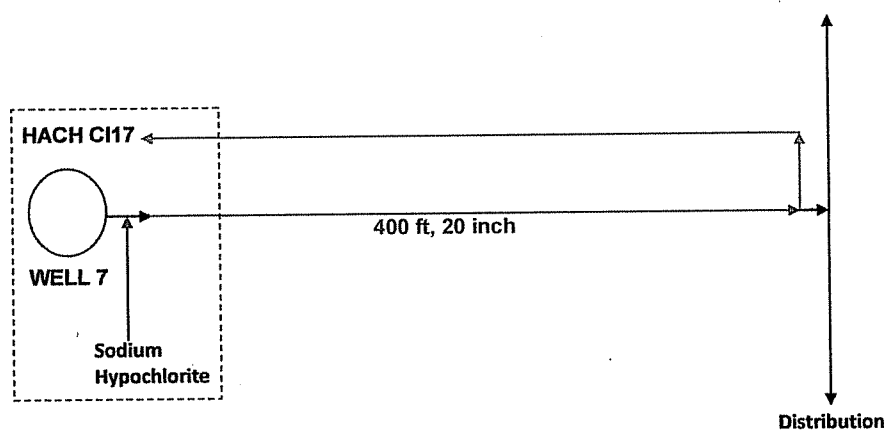
Should we decide to upgrade the facilities in the future then a treatment change filing would be avoided. Once the upgrade was completed, pending would be changed to full certification.

We will optimistically await DEP's decision.

**FAC 1\_upgrade Process Diagram**



**Well 7\_upgrade Process Diagram**



DEP has not provided any information on when to anticipate the results of their review process. As such, even the wtp is currently subject to triggered mentoring

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*The additional Form D for the WTP was completed, certified by an Engineer and submitted to MA DEP SERO on Nov. 17<sup>th</sup>.*

### **Ground Water Rule (GWR)**

- *Systems that apply for and receive 4-log approval will be required to submit daily calculations of actual-CT (concentration X time) vs. required CT.*
- *Continuous monitoring of disinfectant will be required.*
- *Disinfectant monitoring must be at the first customer or after the point in treatment where CT is calculated.*
- *Daily CT will be calculated using the lowest chlorine residual and the highest flow rate.*
- *Falling below the required CT for 2-days in a month will be considered a violation that must be reported to the public within 30 days.*

*No change for the WTP and wells 1, 4, 5 & 6 that supply it. Well nos. 2, 3 & 8 at Facility no. 1 and Well no. 7 will not meet the CT requirement and will be part of triggered monitoring until modifications are made.*

### **Meter Pits**

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The *Meter Pit Letters* were sent out on 12/16/2009. There were a total of 436 letters.

There has been a rather surprising response to the letters. Staff fields calls with questions and/or requests for meter monitors daily.

As of 12/31 the Dept. has sold 24 monitors.

### **NSTAR Right of Way**

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Included in the Board's packet is a memo with the opinion of Town Counsel regarding the use of herbicides by NSTAR-contractors to control vegetation in the watershed right-of-way.

### **Tanks 1 & 2**

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The inspection reports of Tank nos. 1 & 2 have just been received from Haley & Ward. This will be a topic for the next Board meeting.

*Both of our storage reservoirs were inspected on October 15<sup>th</sup>. The inspections were done by Leo R. Yuskus, Sr VP Haley and Ward, Inc.*

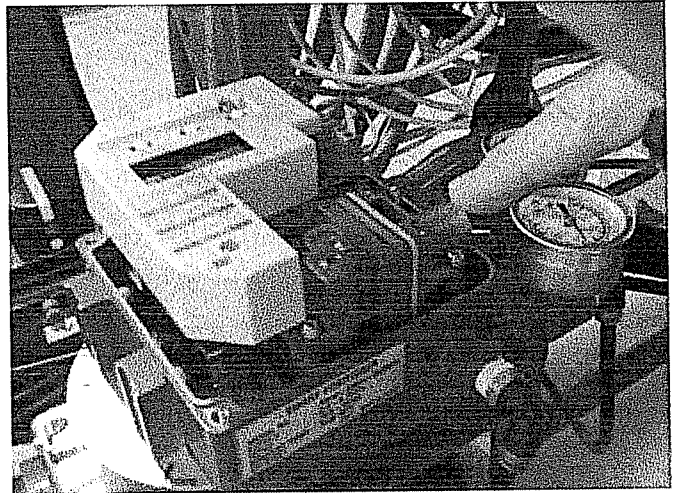
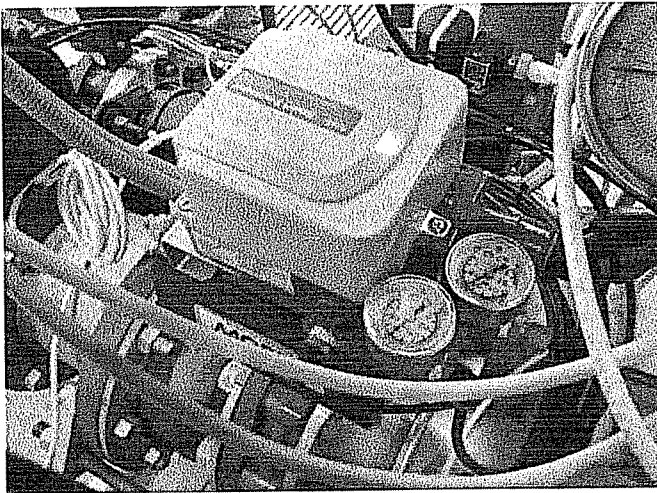
### **WTP (& Membrane Status)**

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- **Flow Control Valve**

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Replaced a failed electro-pneumatic valve positioner on the flow control valve for rack no. 1. With the help of Industrial Technical Services the job was completed in 6 hours. There were times that it seemed like it might take 6 days (*someone's getting even for WWII*).

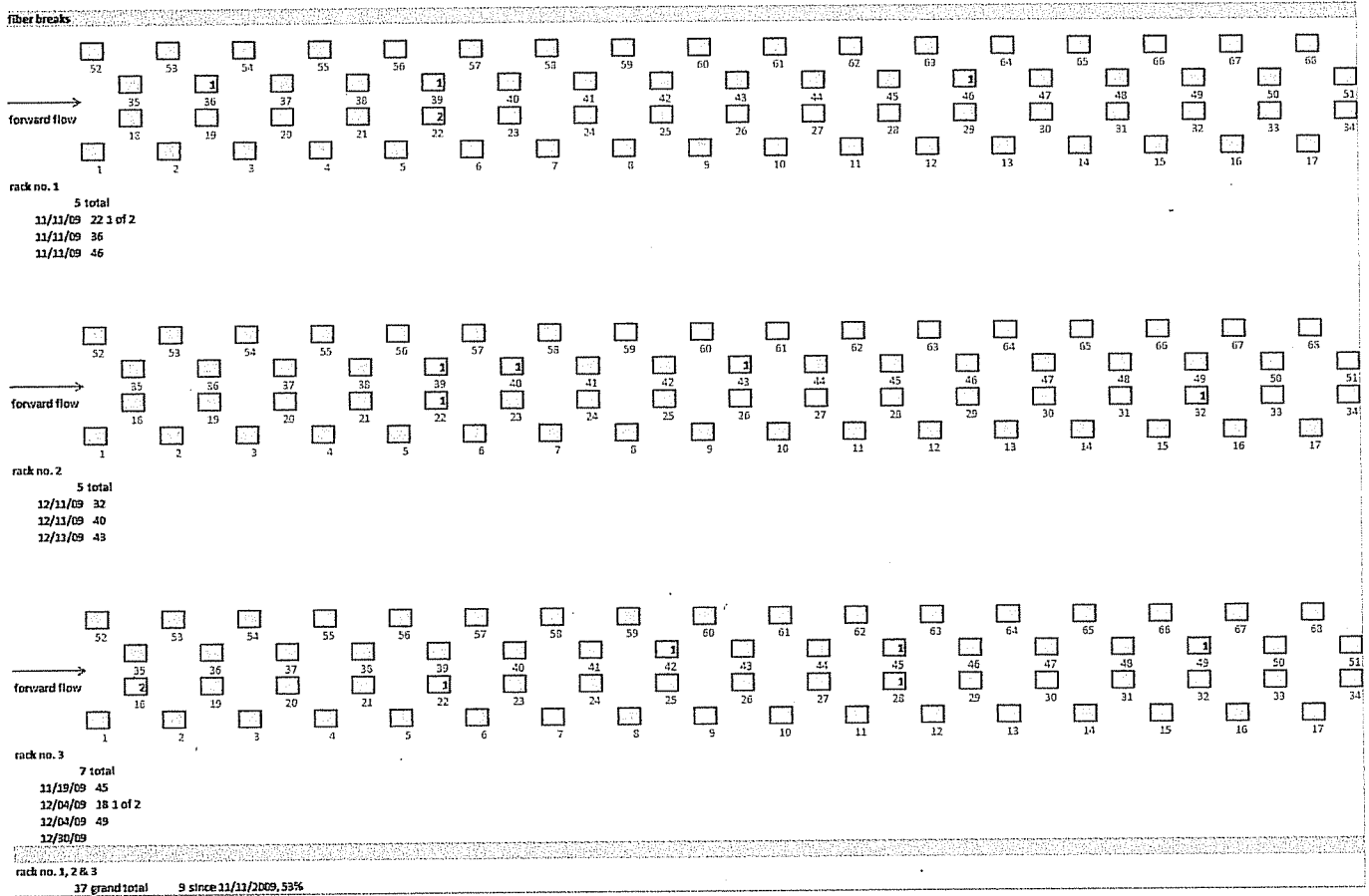


- **Membrane Fiber Breaks**

As per the last report, there were 4 membrane fiber failures during November and now, 5 fiber failures in December.

Pall Corp. is being kept aware through email (below). Included was a spreadsheet with a map of the fiber breaks across the 3-racks. Since the wtp was placed in service there have been 17 fiber breaks – 9 breaks have occurred since Nov. 11<sup>th</sup>.

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Not that I would ever defend their *lightning speed responses*, but Pall is closed for the holiday season.

From: Louis Briganti  
Sent: Thursday, December 31, 2009 1:21 PM  
To: 'Lance\_Benjamin@pall.com'  
Cc: Jesse\_Campbell@pall.com; Mike\_Petrucco@pall.com; Chris\_Scalza@pall.com  
Subject: RE: Orleans 3-fiber failure  
Attachments: wtp Fiber Break Data.xlsx

I have not heard from anyone since Lance's email of 11/20.

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To provide an update, there were a total of 4-fiber breaks in November and an additional 5-fiber breaks in December. We have a grand total of 17 breaks with 9 (53%) occurring since Nov. 11th.

The attached file shows the distribution of breaks across the 3-racks.

Should I be concerned and/or concerned for next summer's high demands. I would appreciate some feedback.

Thanks & a Happy & Safe New Year!  
Lou

-----Original Message-----

From: Lance\_Benjamin@pall.com [mailto:Lance\_Benjamin@pall.com]

Sent: Friday, November 20, 2009 5:01 PM

To: Louis Briganti

Cc: Jesse\_Campbell@pall.com; Mike\_Petrucco@pall.com; Chris\_Scalza@pall.com

Subject: RE: Orleans 3-fiber failure

Hi Lou,

I'm going to put you in touch with Jesse Campbell (process engineer) and Mike Petrucco (process engineering manager). I know your concerns are life of the membranes and plant. I will talk with Jesse and Mike early next week and see what they think and someone will give you a call.

There are a number of things that can cause fiber breaks and I do not want to get over anxious about it. However, I suggest we keep a close eye on it in the near term just in case.

Thanks,  
Lance

• **Membrane Replacement**

After meeting with the Town Administrator and Town Counsel on 12/08 and 12/15 it has been concluded that replacement membranes will need to be publicly bid.

Apparently there is no support from the Attorney Generals' Office for sole sourcing replacement membranes from Pall Corp.



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With this effort finally concluded proposals were solicited from 2-engineering firms for assistance with this project. The request included the method and approach to the replacement and the preparation of an RFP.

Jeffrey P. Musich, P.E., Vice President of Wright-Pierce provided the best approach and price (BY FAR). My reasoning for awarding the work to Wright-Pierce is exemplified in Jeff's email of 12/09 (below).

From: Jeffrey Musich [mailto:jpm@wright-pierce.com]  
Sent: Wednesday, December 09, 2009 9:51 AM  
To: Louis Briganti  
Subject: Some ideas for you

Hi Lou-

I did some brainstorming on this issue with my staff yesterday and have a few ideas for you.

We did two recent membrane WTFs in Hadley and Acton, both with proprietary provisions for one membrane system. Hadley was SRF funded and they had their lawyer craft up a document they signed called a "Determination Regarding Proprietary Specification" and filed it in the project file in case a Methuen or another contractor came around and tried to challenge it later during bidding. Acton did the same (see scan attached). We guided them by informing them of the need and working with them and/or their lawyer to craft up the language.

Another approach in Chapter 30 would be to have an RFP process with separate sealed envelopes for price. We just did this with meters in Haverhill working with a very conservative procurement officer. Basically, we issued an RFP to 3 preselected meter vendors. We developed highly advantageous, advantageous criteria, etc., for several categories, and selection criteria. Using this approach, you could heavily weight key factors such as "system must match with current system, ability to design changes to PLC programming etc.". You would select a vendor, than open fee envelopes. This is specified clearly in Chapter 30, but has been applied in many cases to purchase of equipment. Our role in Haverhill was to write the solicitation document and were one of the selection team who graded proposals. I think this will work for your case very well. We have several examples of this internally

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Lastly, the big issue, is MassDEP. A new membrane will be an issue with MassDEP. Based on what happened in Gardiner and what Lincoln just went through, I believe that we could have DEP provide criteria for our RFP process that may challenge another vendor. We could also use DEPs feedback to craft the RFP.

The more I think about this, the more I see no way around using just Pall. How would the current warranty provisions be retained if a new vendor's system is mixed in? We have normally prevented problems with this issue by including a replacement cost in the bid at the time of construction. But, by the way Pall got into Orleans, this was likely not done. Was there any implied or firm pricing included in any of the shop drawings that specified replacement parts at some cost? This could be viewed as an implied contract. Lastly, are there any extended warranties that are still in place that could be jeopardized if a new vendor jumped in. Maybe this can be viewed as a warranty issue. I assume the warranty on equipment is still in place, as well as water quality performance, which normally extends beyond the 1 year equipment warranty.

I might suggest a couple of next steps:

- a. See if there are any other vendors in the region with Microfiltration pressure systems that are outside-in. I do not think there is another vendor.
- b. See what southeast region says on this (Call Mike Quink?)
- c. Maybe we can convene again to see where these first steps take you.

As you stated, going away from Pall is not in the Towns best interest. I know most membrane systems buy and replace the systems without bidding.

Let me know if I can help further, may be some of our experiences are of value with your attorney and procurement staff. Let me know if I can help further. I am working from home because of the snow storm today, my home number is 207-933-3159. Try e-mail or my cell also if this is more convenient. Hopefully this is helpful.

Thanks Lou...Jeff

Jeffrey P. Musich | P.E., Vice President

Wright-Pierce | Water, Wastewater & Infrastructure Engineers

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Information to date:

1. Replacement membranes must be publicly bid -Town Counsel.
2. Pall UF membranes (LOV5210) would only require that MA DEP be notified. The membrane material is PAN -Polyacrylonitrile.
3. For Pall MF membranes (UNA-620A), MA DEP will require a demonstration test with the first rack in lieu of a pilot study. This is a verbal commitment (2009.06.09, DEP SERO). These MF membranes are made of PVDF - Polyvinylidene fluoride.
4. Any other membranes will need to be piloted and also be listed on MA DEP's Approved Technologies List.
5. Layne Christensen Company could supply Toray UF membranes and are willing to conduct a free pilot study (2009.06.30, WTP). The Toray PVDF membranes have a larger pore size than the Pall UF membranes. Layne could provide some level of ongoing support.
6. Technology Sales Associates with General Electric Co. can supply ZeeWeed 1500 UF membranes (PVDF) along with a free pilot study (2009.07.09, WTP). Ongoing support is not provided.

**Well no. 6**

Redevelopment of well no. 6 is complete. The well was placed back in service after installation of the pump and motor on Dec. 2<sup>nd</sup> and after a clean coliform sample was analyzed.

The specific capacity of the well improved from 5.87 GPM/ft at 172 GPM to 55 GPM/ft at 481 GPM. We were timely in redeveloping the well and fortunate to recover so much capacity.

With well no. 6 in service we have initiated a well rotation for the winter and well no. 4 is currently being rested.

*Production capacity for well no. 6 has decreased. On August 18 the flow range for the well was reduced to 330 GPM. As an extra precaution and with reduced demand well no. 6 was taken out of service Sept. 9<sup>th</sup>.*

**Well no. 8**

The request for final inspection of well no. 8 was forwarded to MA DEP on November 13<sup>th</sup>.

**Miscellaneous**

• **Wind Turbine**

A conference call with MTC was held on 12/08. The Town Administrator and Planning & Water Dept.'s participated in the call.

MTC arranged for the call as a final interview for the applicants for this current round of grant funding.

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In short;

1. There is a total of \$2.5M available for this round and there are three times the number of applicants as there is available funding.
2. MTC will be considering reducing the dollar amount of awards in order to spread the monies across a greater number of projects.
3. Project selection should be completed by the 3<sup>rd</sup> or 4<sup>th</sup> week of January.

- **Eastham**

Nothing to report.

- **WQ Lab**

Work continues to prepare the necessary SOP's and Laboratory Manual before the application for certification is submitted to MA DEP.

*Having successfully completed 2-rounds of PE testing opens the door for us to apply for MA Certification.*

- **Spare Parts**

We are working with Tyco Flow Controls to verify some of the spare parts that we would like to maintain on hand. These relate to the multitude of valves and actuators in the wtp – NOT easy to try to work around the distributorships to try and avoid Pall Corp.'s mark up.