

*K. DeLury*  
TOWN OF ORLEANS  
CLERKS OFFICE

**MEETING OF THE ORLEANS  
BOARD OF WATER/SEWER COMMISSIONERS**  
December 2, 2009

10 MAY 27 PM 2:21

A meeting of the Board of Water and Sewer Commissioners was held Wednesday, December 2, 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, Mark Carron, Board of Selectmen liaison, 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**

Ann Hodgkinson made a motion seconded by Jimmy Dishner to approve the minutes of the meeting of November 18, 2009 as amended. The vote by the Board was 4-0-1 with Judith Bruce abstaining as she was not present at the meeting.

**SUPERINTENDENT'S REPORT**

**SEE ATTACHED**

**OLD BUSINESS**

**65 QUANSET ROAD, LINDA SARLES**

The Board of Water and Sewer Commissioners tabled discussions until the owner or her representative could be present as requested.

**NEW BUSINESS**

**COMMITMENTS/ABATEMENTS/REFUNDS**

A motion was made by Jimmy Dishner seconded by Judith Bruce to commit for the month of November 2009 to rate \$0.00, to services \$640.00, to usage \$0.00, to installations \$1.935.10 and to added billing \$393.16. The vote by the Board was 5-0-0.

**ADJOURNMENT**

At 2:18 p.m., a motion was made by Ann Hodgkinson and seconded by Jimmy Dishner to adjourn the meeting. The vote by the Board was 5-0-0.

The next regular meeting is scheduled for January 6, 2010 at 1:30 p.m.

*Ann H. Bruce*



Secretary, Board of Water/Sewer Commissioners



**Board of Water & Sewer Commissioners**

**02Dec2009**

**Budget FY11**

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**

Work is in progress to update our Emergency Response Plan (ERP) and meet the 12/31 deadline to submit MA DEP's *Compliance Checklist*. This will be a priority until complete.

*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.*

*A not-insignificant amount of time will need to be dedicated to beefing up our Emergency Response Plan before the 12/31 deadline.*

**Distribution**

Staff isolated a difficult main break on Rock Harbor Road on 11/27. The break is in a 6 inch line in the vicinity of a drainage culvert – where the leak was confirmed. The section of pipe with the break was isolated with 2-gate valves. The area will be allowed to drain its excess water before any digging takes place - much safer than digging or placing men in a quagmire.

**Eastham**

No news.

A small contingency was added to the FY11 engineering budget in the event that *Eastham* resurfaces.

*Scope of work for the Orleans feasibility study portion of the agreement between Environmental Partners Group and Eastham;*

*Task 2. Orleans Water Source Feasibility Study*



## Board of Water & Sewer Commissioners

*Under this Task, Environmental Partners will conduct a feasibility study to assist the Town of Eastham in determining whether to purchase domestic water supplies from the Town of Orleans via an inter-municipal agreement (IMA). The feasibility study will include the following analyses:*

- (1) Quantity of water Orleans can commit to selling, initially and long-term, with appropriate approvals from DEP under the Massachusetts Water Management Act,*
- (2) Pricing structure for Eastham under an IMA,*
- (3) O&M responsibilities,*
- (4) Assessment of likely transmission main routes, and*
- (5) Cost-effectiveness compared to in-town sources.*

Notes:

*Eastham is probably looking to get a better feel for the capacity of their 3-potential sources before beginning any feasibility study.*

*Mention has been made that a meeting between the two Boards of Selectman will be sought before a feasibility study is initiated. Eastham may want to discuss pricing and availability at this meeting.*

## **GWR**

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>.

The same *Form D* will be completed for Well no. 7 and Facility no. 1. We are collecting Chlorine Residual data that may improve the application.

*MA DEP mailed additional requirements for the Ground Water Rule (GWR) that were received on October 23<sup>rd</sup>. This is named Form D and is labeled as a Certification while the previous submission of Forms A, B & C in August is now considered and Estimate.*

*The decision to consider this new rule as a process that will take a year or more to unfold is accurate.*

*New to this communiqué;*

- This is now officially a Treatment Technique Rule (you can't test for viruses therefore monitor treatment).*
- 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.*

*This will mean 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.*



## **Board of Water & Sewer Commissioners**

*Round 2 of the application process is due December 1<sup>st</sup>. All purveyors will be required to comply with triggered monitoring until MA DEP is able to wade through its own approval process.*

### **Meter Pits**

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We anticipate mailing the *reminder letter* to accounts with meter pits before the Holiday's.

*Included in the Board's packet is a draft letter to be sent as a reminder to those customers that have meter pits.*

### **Tanks 1 & 2**

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Awaiting Haley & Ward's report.

*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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- **CIP Pump -VFD**

We have installed a Variable Frequency Drive (VFD) to control the CIP motor (membrane chemical *Clean In Place*). The motor now takes 30 seconds to ramp to its operating speed. The original installation had the motor going to 100% speed on start up. Controlled acceleration and deceleration has eliminated the *hammer* and shock to the CIP piping (and pump & motor itself). This will prolong the life of the equipment and prevent the line ruptures that have occurred in the past.

- **Drying Beds**

Drying Beds 1 and 3 were isolated and cleaned during the 1<sup>st</sup> two weeks of November. The ww-facility work is complete.

*The decant chamber was cleaned during the week of October 25. The chamber was emptied and all sludge removed by pumping the material as a slurry to the drying beds. After a wash with clean water the basin was returned to service.*

*Drying bed 2 was isolated, drained and cleaned. All sediment was removed and the bed returned to service.*

*These wastewater facilities are addressed each spring and fall; pre and post summer production.*

- **4 X Membrane Fiber Breaks**



**Board of Water & Sewer Commissioners**

There were 4-membrane fiber failures during November. Below is the email communication with PALL Corp.

From: Lance\_Benjamin@pall.com  
To: Louis Briganti  
Cc: Jesse\_Campbell@pall.com; Mike\_Petrucco@pall.com; Chris\_Scalza@pall.com  
Subject: RE: Orleans 3-fiber failure  
Date: Friday, November 20, 2009 5:01:26 PM

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

From: "Louis Briganti" [lbriganti@town.orleans.ma.us](mailto:lbriganti@town.orleans.ma.us)  
To: Lance Benjamin/Cortland/Pall@Pall  
Cc:  
Subject: RE: Orleans 3-fiber failure  
Date: 11/20/2009 03:30 PM

Left you a phone message ... rack 3 failed its IT this morning with 1-fiber broken.

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

From: Lance\_Benjamin@pall.com [mailto:Lance\_Benjamin@pall.com]  
Sent: Wednesday, November 18, 2009 4:24 PM  
To: Louis Briganti  
Subject: Re: Orleans 3-fiber failure

Hi Lou,  
I've received your e-mail...Let me think about this. If you have not heard from me by Friday, give me a call.

Lance



**Board of Water & Sewer Commissioners**

From: "Louis Briganti" [lbriganti@town.orleans.ma.us](mailto:lbriganti@town.orleans.ma.us)  
To: Lance Benjamin/Cortland/Pall@Pall  
Cc:  
Subject: RE: Orleans 3-fiber failure  
Date: 11/18/2009 11:03 AM  
Subject: Orleans 3-fiber failure

Hi Lance ... hope all is well.

I left you a phone message yesterday. Our rack no. 1 failed its IT according to its routine schedule. There were 3-broken fibers in 3-different modules. This is the 1st time there were multiple fiber failures. Also, this is the 1st time a single module showed a second fiber failure.

Any thoughts (or concerns I should have)??

Thanks,  
Lou

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*In the Boards' packet is the document that will be used to request a ruling from the Attorney Generals' Office on sole sourcing replacement membranes from Pall Corp. This is in final review by Town Counsel who will issue the request through the Town Administrator's office.*

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 -Polyacrilonitrile.
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.
7. Pall would like to talk to us. Bob Cundell & Dave Glovinsky would help with a pilot study and sell us membranes directly -cut out F.R. Mahoney (2009.06.05, Lance Benjamin).
8. A letter is in progress that will request a ruling by the MA Inspector General on sole sourcing membrane replacement to Pall.
9. Pall has assigned Chris Scalza, P.E. to the Orleans account for the design flow test that has been proposed. The operating parameters for the test are unchanged, but Pall considers the TMP limit for the test to be 45 psi -the physical limit of the modules.



**Board of Water & Sewer Commissioners**

**Well no. 6**

Redevelopment of well no. 6 is complete. During redevelopment, the motor and pump were removed, inspected and cleaned. Minor work costing less than \$1,000 was done to replace a bearing and refurbish the motor. The project will be completed *under-budget*.

Installation of the pump and motor is scheduled for Dec. 2<sup>nd</sup>.

*Maher Services is to begin the redevelopment of well no. 6 the week of November 2nd.*

*The bid to redevelop well no. 6 has been awarded to Maher Services. Work should begin once the paperwork formalities have been completed.*

Bid results:

|                      |             |
|----------------------|-------------|
| 1. Layne Christensen | \$13,727.40 |
| 2. Maher Services    | \$12,600.00 |
| 3. Dennis L. Maher   | \$13,521.00 |

*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 Coliform bacteria sample of well no. 8 collected on 10/21 came back *clean*. In addition, MA DEP has given us verbal approval not to install the security fence until the spring. As a result, we have forwarded our request for final inspection of well no. 8 to MA DEP. Once we receive the approval the well can be placed in service.



**Town of Orleans**  
*Water Department*

Lou Briganti  
11/30/2009

**Board of Water & Sewer Commissioners**

Environmental  Partners

1900 Crown Colony Drive  
Suite 402  
Quincy, MA 02169  
TL 617-657-0200  
FX 617-657-0201  
[www.envpartners.com](http://www.envpartners.com)

November 13, 2009

Mr. Richard J. Rondeau  
Massachusetts Department of Environmental Protection  
Southeast Regional Office  
Water Supply  
20 Riverside Drive  
Lakeville, MA 02347

RE: Orleans, Massachusetts: PWS#4224000  
BRP WS 20: Approval to Construct Source > 70 gpm  
Transmittal Number: X225674  
Request for Final Inspection – Well No. 8

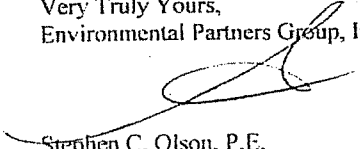
Dear Mr. Rondeau:

The Town is in receipt of DEP's approval letter dated March 25, 2009 for the above referenced facilities. Please be informed that the new source facilities have been constructed in accordance with the plans and are in compliance with DEP's regulations, guidelines, and policies for public water systems. The facilities are fully operational, tested, and ready to be placed in service.

On behalf of the Town of Orleans, we are hereby requesting a final inspection of the installed facilities. Please feel free to contact me at (617) 657-0255 with a date and time that is convenient to you, or if you have any follow up questions, or require additional information. I can also be reached at [sco@envpartners.com](mailto:sco@envpartners.com).

Thank you in advance for your cooperation and assistance.

Very Truly Yours,  
Environmental Partners Group, Inc.

  
Stephen C. Olson, P.E.  
Senior Project Manager

Cc: Louis Briganti, Superintendent, Orleans Water Department  
Scott Haberstroh, Environmental Partners Group, Inc.  
Mike Quink, DEP SERO

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**Miscellaneous**

- **BOS Meeting**

Provided an update to BOS on the Groundwater Rule at their meeting of November 12<sup>th</sup>.

- **Coliform Testing**

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**Board of Water & Sewer Commissioners**

The Lab participated in its 2nd round-robin Performance Evaluation Test (PE) on November 10<sup>th</sup>. Thirteen blind samples were tested for total Coliforms and *E. coli*. This was a more rigorous PE test in that 10-samples were analyzed by Presence/Absence and 3-samples required enumeration. We received a perfect score of 100% correct.

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