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ORLEANS, BREWSTER, EASTHAM GROUNDWATER PROTECTION DISTRICT

BOARD OF MANAGERS MEETING

DECEMBER 11, 2013

AGENDA

9:00 A.M. 1. CALL TO ORDER

2. APPROVAL OF BOARD OF MANAGERS MINUTES:

- November 13, 2013

3. CITIZEN'S FORUM

4. CHIEF OPERATOR UPDATES – JAY BURGESS

5. FINANCIAL UPDATE:

- Bank Balances

6. APPROVAL OF TREASURY WARRANT NO. 4

7. ANY ITEMS FOR FUTURE AGENDAS

8. MOTION TO ADJOURN MEETING

ANY OTHER BUSINESS THAT MAY LEGALLY COME BEFORE THIS BOARD

**ORLEANS, BREWSTER, EASTHAM GROUNDWATER PROTECTION DISTRICT
BOARD OF MANAGERS MEETING
DECEMBER 11, 2013**

Board Present: John Kelly, Chairman, Orleans; Charles Sumner, Brewster;
Martin McDonald, Eastham.

Others Present: Jay Burgess, Chief Operator; Cyndi Bachman, District Secretary;
Beverly Carney, Orleans resident; Courtney Gavin, Orleans Sunshine Committee.

1. Meeting called to order at 9:00 a.m..

2. A motion was made by Martin McDonald to approve the Board of Managers Minutes dated November 13, 2013. This motion was seconded by Charles Sumner and unanimously approved and passed. Vote: 3-0.

3. Citizen's Forum:

- Beverly Carney, Orleans resident, gave a hand out to the Board for their review, and asked the Board if they would consider having a Technical Advisory Committee to assist Jay, the Board of Managers, and the Boards of Selectmen.
- John Kelly stated he is not interested in having a TAC Committee. It is the Boards of Selectmens responsibility to appoint that Committee and not this Board.
- Charles Sumner asked Jay if he sees any value in having a TAC Committee.
- Jay stated they served their purpose in prior years and they got us to where we are today. If the Board decides to upgrade this plant to last another five to twenty years, with no sewer and no additional capacity, and if the town votes to upgrade the plant to include a beneficial effluent re-use and solar power, then at that point, it may be time to think about putting together a Technical Advisory Committee. They would be helpful when the equipment starts coming in and we don't have time to go through all of the manuals. The TAC Committee loves doing that and would make sure we are getting what we have paid for. But just to merely replace equipment that's already been specified and has proved a twenty-five year track record, and the fact that we are probably going to have an engineer after this meeting, I don't think this is the time to have to deal with an additional six personalities on a TAC Committee. If we get to the point where we need a Committee, I would have no problem, but at this stage of the game I think it would just be another meeting for me to go to.
- John Kelly stated the way the Advisory Board was set up was to do things if the need existed by the Board of Managers.
- Jay stated the TAC Committee did the initial leg work before this plant was built, and did the sludge testing at the lagoons.

- John Kelly stated the IMA states there shall be a TAC Committee to the Board of Managers. Back in the late 90's the Board decided they didn't need a Committee any longer, and it has been that way ever since. Much of what we have now are engineering issues. At this time, the three Boards of Selectmen are not suggesting a TAC Committee.

4. Chief Operator Updates – Jay Burgess:


- **Process** – 21 mg/l – nitrates, all others are in the single digits.
- **Maintenance** – We had an emergency degritter screw repaired. That was one of the items listed in the 2005 Wright-Pierce Report that needs replacement. I called the manufacturer and the cost would be \$38,000. We may get away with \$10,000 in parts. We will continue to do patch work to it until we know what the outcome of this plant is. I do not think spending the \$38,000 out of our limited reserve would be the best money spent to keep this plant running. Other maintenance we are doing is winterizing the buildings, recharge beds and outside water sources. We had a lighting issue in the receiving area, and that has since been repaired. We received all the parts for the denitrification system and have been running those sand filters for three weeks, but that alone does not develop the growth needed to get it to start doing things. The microseed product does not need special storage, and it is not flammable, whereas methanol is flammable and needs approved containers. We have a little more work to do before we decide what product we are going to use. We purchased some of the microseed, but we still have an issue of optimum conditions.
- The lowest dissolved oxygen numbers we have had so far with running the plant the way we've been running it for the past ten years, is 7 mg/l, which is unacceptable for denitrification bacteria to grow. Taking the contaminants and BOD and moving them forward on the RBC's to the point where we are at less of a biological treatment across the RBC's, will be putting out less of dissolved oxygen, so there will be more of a demand, which is a balancing act with our BOD permit.
- I spoke to Brian Dudley of DEP extensively about this because of the nature of the possibility of going too heavy and violating our BOD permit and may be coming in on denitrification numbers. There is a balancing act and a time frame before we can iron it out as to what the right dosage is. He would like to see an engineering plan put into effect for the State to look at and has no problem with us switching it over. He has seen them in operation and they do function, but his concern is getting that dissolved oxygen level down. We are going to check a few more places.

- We shut down one RBC last night that was just spinning. The cold weather increases the dissolved oxygen. We are in the perfect storm of bad things for us to overcome, and an engineering report needs to be done. If we get things ironed out with Stantec, we can piggy back that onto an item. I can have a report done if they would okay it, then Brian Dudley would be satisfied. Along those lines, I asked Brian a question stating, lets pretend we are two years in the future and we have all our issues ironed out and we are putting out 10mg/l regularly on the denitrification system that we put in place, would this satisfy the needs of the District for an additional five year permit if the Boards of Selectmen decide to go for one in 2016? He said that would definitely suffice for the denitrification, however, that's not the only issue any longer. He looked at the 2005 Wright-Pierce Report and due to the aging of the facility and the fact that no action has been taken on any of these items, you will have to start doing some work on the items that need to be corrected. I told him I would give him a copy of my report once I submitted it to the Board of Managers. I also told him the town has to make the decision whether to run the plant beyond 2016. The State will definitely look at the age of this facility if it is to run beyond 2016. Having a lower nitrate number with the existing equipment that we have would satisfy them for our denitrification purposes only.
- John Kelly asked if Brian Dudley mentioned the staffing plan, because he assumes it will be an issue.
- Jay stated he did not talk about a staffing plan. If the town decided to run the plant for another twenty years while we figure out what they want to do and they did an upgrade, it's only going to make it easier for the staff. Right now I tell my guys that they spend so much time on equipment failure that they are wasting a lot of operations time. They are operators and not builders or construction workers who are paid to operate the plant. They are now conditioned to working under these conditions and think this is how a plant runs. For most of the operators, this is the only plant they have worked in and assume this is the way it is. I don't think there would be a staffing issue. Everyone here is at their highest level. Some have a grade 6, and I am a grade 7. This is a grade 5 plant. The State does a calculation based on the amount of equipment you have and process times to determine how much staff you need. I think our staffing plan is adequate.
- John Kelly stated he thought the last time Brian Dudley was here he stated we didn't meet the minimum staffing requirements.
- Jay stated he will be talking with Brian today and will ask him if the current staffing level would be sufficient.
- John Kelly stated it would be helpful to have that information and would be one less thing to worry about.
- Jay stated if the Board is okay with the Stantec proposal today, they could help us with the denitrification report.

- Jay handed out his 2013 Chief Operators Report to the Board for their review. He stated for years he did a five year capital plan until last year, when he did the minimum because we thought we were going to be shutting down in September. This year I took the 2005 Wright-Pierce Engineers Report and listed the items that need significant work. None of these numbers reflect engineering services, installation or construction services. These are equipment replacements and it would just be a matter of removing the old equipment and replacing it with the new equipment.
- He also stated if the town decides to run this plant another twenty years, there are items that could be added to my list with not much of an investment, due to programs and grants for roof solar panels, the effluent reuse system of the current discharge up to 45,000 treated effluent gallons a day, and a drip spray irrigation system that would water native trees and wildflowers on both sides of Route 6, showing the general public what wastewater can do to make an area look nice.
- Then there is the other side of the coin where we continue to neglect the capital needs of the facility and hope nothing goes wrong in rapid succession, and the plant pays for whatever fails. This alternative plan of nursing the plant along until 2016 may be doable, but there's a very strong possibility of equipment malfunctions, failures, and unavailable parts. There may come a time that we would have to shut down for repairs. Whatever the town decides to do, my staff and I are committed to keeping this plant running and doing whatever we can to keep it operating, safely, efficiently and within the DEP permit limits.
- John Kelly asked if the 2.4 million dollars is part of the renewal costs that DEP is going to require based on what we did in 2005, and are these 2005 numbers that have been updated?
- Jay stated, yes, equipment only.
- Charles Sumner stated each of the three towns should appropriate monies in case the plant needs to fix or place something to keep it running through 2016.
- Jay stated he thinks we can make this plant last through 2016.
- John Kelly stated if something breaks and the District does not have the money to fix it, what would be a reserve that we should have through 2016?
- Jay stated he will study this list for another month and give you another report at the next Board of Managers Meeting.
- John Kelly stated the District has no authority to borrow money and it takes a vote of town meeting to get funding. Part of the information you are putting together will be very helpful for town meeting. We will have to decide if whether we can afford to bring Stantec back to help update the plant.
- Jay stated it is foolish for us not to get something going with someone who can represent us.

- John Kelly stated the District will have to absorb the \$12,200 expense from Stantec to get us to that next point to have it in time for the February three Boards of Selectmen meeting.
 - Jay stated now is the time, because this time of year the Districts checkbook is only going down.
 - John Kelly stated part of that agreement from Stantec is they spend a day with Jay at the plant. The 2005 Wright-Pierce Engineering Report does talk about the conversion of the sand filters. When Stantec is here they can look at that and we could have them give that to us as a supplemental proposal. The critical piece now is to have a report back from them within 45 days so we can have it for the February three Boards of Selectmen meeting.
 - Jay stated regarding the plant's winter sale, he would like to advertise 6 cents for in-District towns and 7 cents for out of District towns, for the month of January. He would like to revisit the sale the end of January and discuss whether we would like to continue it through February.
5. A motion was made by Charles Sumner to authorize the execution by contract for \$12,200 with Stantec, with a provision that Jay can also have an endorsed pilot study. This motion was seconded by Martin McDonald and unanimously approved and passed. Vote: 3-0
 6. A motion was made by Martin McDonald to approve the Winter Sale for January to be revisited the end of January to extend through February. This motion was seconded by Charles Sumner and unanimously approved and passed. Vote: 3-0
 7. The Board reviewed the District's bank balances.
 8. A motion was made by Martin McDonald to approve Treasury Warrant No. 4 for payment. This motion was seconded by Charles Sumner and unanimously approved and passed. Vote: 3-0
 9. A motion was made by Martin McDonald to adjourn the meeting at 10:25 a.m.. This motion was seconded by Charles Sumner and unanimously approved and passed. Vote: 3-0.

Respectfully submitted,


Cyndi Bachman
District Secretary

Tri-Town update

Staff photo by Marilyn Miller

Selectman Martin McDonald said residents tend to take things for granted, like pumping out septage every few years, and paying a septage hauler to take it to the Tri-Town Septage treatment facility in Orleans.

But things are changing, he warned.

The Tri-Town plant has served the needs of the residents of Brewster, Eastham and Orleans, plus the outlying towns for 25 years now, he said, noting that selectmen of all three towns, at a meeting in Brewster on Oct. 30, agreed to extend the intermunicipal agreement between the three towns, which is due to expire in May 2015, to at least December 2016.

He said the selectmen of the three towns will meet again on Feb. 26, at which point they will have information on the costs involved to update the plant to continue to operate for another five to 10 years. A consultant a few years back estimated it would cost \$2.5 million to upgrade the plant to continue to operate, but

McDonald said that figure now might very well be \$5 million. The selectmen of the three towns will need this information if they are going to ask their town meetings to take any action on the treatment plant next year.

He warned, "it will be a fairly significant change if we cannot keep the Tri-Town plant operating in some fashion of coming up with a reasonable alternative."

Again, a placeholder for TRI before that deadline passes in your 2013 Annual Town Reports, along the lines of this perhaps but capable of educating District voters and taxpayers of their options.



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The old cassette recorder is incapable of noting a manager's unavailability or 16 Oct votes RE: IMA extension (2-0) and Warrant #2 (2-0) also 13 Nov denitrification pilot (2-0) and Warrant #3 (2-0) - unanimous but the barest of quorums was not acknowledged by the Chair. Corrections and future votes by the BOMs would better be recorded numerically and verbally for your record given the existing District technology.

FRIDAY, NOV 29, 2013 • THE CAPE CODDER

As tasked last month, plant operator Burgess' work to introduce another supplemented carbon source (methanol) to decrease groundwater leaching and soil storage of organic Nitrogen would be greatly enhanced with some level of technical, advisory, and management support from this Board. Circumventing the N-cycle just prior to watershed discharge at a modest outlay for a pump and safe storage today is of an immeasurable future return on investment.

bc