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

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

**Others:** Jay Burgess, Chief Operator; Cyndi Bachman, District Secretary; Beverly Carney, Orleans resident; Roger McAdams, Orleans resident.

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 August 14, 2013. This motion was seconded by John Kelly and approved and passed. Charles Sumner abstained.
3. A motion was made by Martin McDonald to approve the Board of Managers Minutes dated August 28, 2013. This motion was seconded by John Kelly and approved and passed. Charles Sumner abstained.
4. Citizen's Forum:
  - Beverly Carney stated the Orleans Health Agent reported that JP Noonan of Eastham's recent mobile transport of pump-outs, pushed into a 10,000 gallon tanker and hauled to Carver. She also stated when the doors close at Tri-Town next September, you all will be scrambling for some institutional accountability; with transfer sitings, and accidental spill plans; shoring up gaps in local tracking of septic and grease flows; user reminders to schedule regular maintenance; and any means to control market costs to ensure safe conditions of transport, treatment, and discharge. Next weekend is the our big Waters Celebration for the Orleans Pond Coalition and District towns. Sadly, the regions' top experts said thanks, but no thanks to "farewell tours" of Tri-Town. She also stated to inform the honey wagons that these are their last seasons here so they at least can plan accordingly.
5. Discussion Tri-Town Decommissioning Plan:
  - The Board reviewed Stantec's Kick-Off Meeting Notes from the meeting of August 28, 2013.
  - John Kelly stated we coordinated with Stantec to get a copy of their more formal timeline, with estimated costs to do some phasing of the work, and to see what we can accomplish now versus what we will have to hold over, due to lack of funding. One of the things we talked about was the joint meeting we are having with the three Boards of Selectmen the end of October. One of Brewsters' Selectmen stated Brewster would like to host that meeting. John asked Charlie to

ask his Selectmen if the last week of October would work for them to meet with the three Boards. The goal was to have a timeline report by October 16<sup>th</sup> to be circulated to the three Boards for their review.

If we have our meeting with them the following week, we could have the timeline report as a focal point. When we discussed this at our last Board of Managers Meeting, we started working backwards from May 30, 2015, and realized there are a lot of things that have to be done. From a timeline standpoint, we had a discussion of when we would need funding for the final design and demo biddings in order to go forward. September 2014 came up only because of the lead time necessary to do all of this. It almost appeared that we would need the funding for demolition May 2014 and felt that we could have Stantec put together their proposal for a timeline to break down the costs for design. We could have some of the preliminary work done with the ability to fund it with the existing cash at the plant. Otherwise, we have a hurdle to get the money from the three towns.

- Charlie Sumner stated he doesn't think September is realistic. There's a lot of permitting, biddings, and specifications that need to be done.
- John Kelly stated the other issue is if we don't meet those deadlines, we would have to extend the IMA for the purpose of decommissioning. One of the things we are focused on is the salvage value of the equipment or lack thereof. We had a discussion about the fact that a lot of this facility is built around the equipment.
- Charlie Sumner stated Tom Daly forwarded him the meeting notes from Stantec.
- John Kelly stated Martin McDonald wanted to have a revised timeline schedule from Stantec. He also stated there is a lot of uncertainty of what the costs will be. We have been hearing anywhere from a million to a million five, but until you have the bids in hand, we won't know.
- Charlie Sumner stated he doesn't think Brewster will want to have a Special Town Meeting in January 2014, and doesn't think that it is even realistic. We have a lot of education to do and it is just not going to happen. Stantec needs to define the permitting issues, and timelines.
- Martin McDonald stated until we see Stantec's report, we won't know if it would be appropriate to have a Special Town Meeting in January.
- John Kelly stated we need to look at the MEPA review to see what the protocols would be for demolition and check out any other permitting. It doesn't seem it would be much more than the standard construction protocol for the protection of run-off. Stantec talked about excavation and going down 30 feet into the basement. They asked whether or not blasting is allowed, which it is not, so they would have to jack hammer everything in the basement.

- Charlie Sumner stated we will need some hefty funding to do all of this.
- John Kelly stated the IMA ends May 30, 2015 and we talked about working backwards from that date needing six months for bidding, demolition, and restoration. If we wait to appropriate funds for design, we will be working against that May 30 drop dead date. What if we can't finish by that date? If we get some of the design earlier and line up the permitting before May, it puts us ahead of the curve.
- Charlie Sumner stated I don't know how you do that before May without the towns calling a town meeting.
- John Kelly stated if the total fee was \$150,000 and they only need \$50,000 for preliminary, we could sit down and look at the operating budget here at the plant.
- Charlie Sumner stated after looking at the District's cash flow, I understand where you could take the \$7,500, but I think you are trying to get blood out of a stone if you think you are getting funding from this plant. It's not realistic to think this plant could come up with \$50,000 or \$60,000. If you really want to meet this timeline in October, you really need to call a Special Town Meeting.
- John Kelly stated that is the discussion we need to have with the three Boards of Selectmen after we have an opportunity to see this laid out in a little more detail. When we go to town meeting, we may only have one shot to get the money for design and demolition, which we are going to call another Special Town Meeting in the Fall for demolition.
- Charlie Sumner stated he doesn't see Brewster being ready to vote on this in May. Brewster has a town meeting in November, and I am going to have to ask for this funding and change Brewster's Warrant. He also stated he does not want to close the plant in the Fall, but would like to keep it operating as long as possible, as it will help the District employees with their retirement benefits the longer we keep this plant running, which I have sensitivity to.
- John Kelly stated when we looked at the timelines, we asked what the alternatives are.
- Charlie Sumner stated at least an extension on the decommissioning phase.

#### 6. Chief Operator Updates – Jay Burgess:

- **Process** –20 mg/l nitrates, all other parameters in the single digits.
- **Part-Time Employees** – We have hired two part-time employees from Allied Personnel for 8-10 hours a week to help with receiving, maintenance and lawn mowing, as well as helping to maintain the recharge beds and doing equipment maintenance.

- **Carbon** – The plant is overdue for carbon replacement and it should be replaced by this summer. Instead of a full replacement for \$75,000+, I got a price from Global Tech Vactor Service who will vactor out two feet of carbon and have it tested and disposed of it at the Bourne Landfill. The cost would be \$10,000 to \$12,000 allowing us to make it through another year without having any odor complaints. I will be getting quotes from Global Tech Vactor and Calgon Carbon.
- John Kelly asked what the District has left in the operating budget for repairs.
- Jay stated there was \$75,000 with about \$40,000 left for repairs.
- John Kelly stated as of the known things we need to address right now, is the carbon at the top of the list?
- Jay stated obviously the list got trimmed quite a bit when the life span of the plant was diminished. Some of the projects we planned to do are being pushed aside. We are now on an as needed basis for repairs. We do all the equipment maintenance as per the manufacturers recommendation, however, we could have a motor go at any time. We just did the hydraulics on the filter presses, the filter press feed pumps, and all the air lines, and rebuilt the gravity belt thickeners. My biggest concern is the RBC's lasting. We have been removing growth on them to keep the unit as light as possible. All of these things can be replaced, but no one on the Board of Managers wants to replace them.
- Charlie Sumner said if the plant is not closed next Fall, we have to run it through May 2015.
- Jay stated provided that every major piece of equipment decides not to go at the same time. The odor control needs to be fixed. I am taking a pro active approach right now and I would like to have the carbon replaced before November 2013.
- John Kelly asked that this be placed on the Agenda for the October meeting for discussion and vote.
- Charlie Sumner asked the Board how their towns are going to fund Phase I of the decommissioning of the plant.
- Martin McDonald stated Eastham will address it at their town meeting in their operating budget.
- John Kelly stated Orleans does not have \$400,000 in cash. We will probably borrow the cash. The numbers we have been talking about all along have been a million dollars plus. I know there is a feeling that there is value in the equipment here, but it cannot be removed until demolition, due to the walls being built around them. Stantec did tell us that we may not get a lot of cash for the equipment.

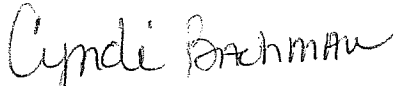
- **U.S. Army Corp of Engineers** – The U.S. Army Corp of Engineers contacted us asking to do a power assessment of the plant next week. The plant is on FEMA's list in case of an emergency.
- **Generator** – One of the pre-heaters on one of the generators is not working so we ordered a replacement part which is on back order.
- **District Employees** – Jay stated the District employees are getting anxious and asking him daily for a firm date on when the plant will be closed. The Board of Managers previously promised to have a representative from Barnstable County Retirement attend one of our meetings so that the employees could ask their questions, as well as having someone come in and explain unemployment benefits, health care, cobra, severance packages, etc. I get these questions every day, and as of today, these questions have not been answered. It seems that this demolition has gone into hyper mode from our last Board meeting. I need some answers for the employees who continue to work here, and who I do not want to lose. Some of them are currently trying to track down jobs. Not only do I have employees asking questions every day, but the haulers are getting very ancy as well. A lot of them are under the impression that because the town meeting vote failed, the plant will be open forever. They have not heard any information from any official, nor has anyone had any meetings with them explaining the situation. Every day I hear they have hundreds of thousands of dollars invested in equipment.
- John Kelly asked Jay to get a list of issues from the District employees regarding their questions, as well the questions from the haulers, and we will provide that list to the three towns Boards of Selectmen at their October meeting. Orleans is a divided Board on whether the town will provide any septage treatment in the future. In 2005 - 2006, when Wright Pierce Engineers did their study of the plant and its future needs, there was a big section on septage. Putting these questions in writing for the Board of Selectmen, and hearing the answers from someone other than me, might be helpful. I tell my Board of Selectmen that there are 10 million gallons a year hear at Tri-Town. Where will it go? The tanks still have to be pumped, and there are going to be solids and treatment. The Barnstable plant now takes 10 million gallons a year.
- Jay stated some of that has to be from Barnstable. If you show up there with a tanker from Harwich or Eastham, they will turn you away. The Chatham plant will only accept Chatham, and the Provincetown plant will not take septage.
- John Kelly stated Brian Dudley of DEP has stated that there are no flow control requirements and they cannot regulate interstate commerce. The discussion of the three Boards can't just be that the private sector will just handle it .
- Martin McDonald stated why don't we document the information regarding the disposal requirements of the surrounding plants.

- John Kelly stated the haulers will dispose of it wherever it is the cheapest. If they have to go further, the costs will go up. Eventually it will get back to the Boards that the local homeowners are now paying twice what they paid before and not happy about it. Unfortunately there are a lot of issues that go along with these discussions, but the reality is there are 10 million gallons that have to go somewhere and the market will drive up the cost for disposal and options will be more limited.
- Jay stated he has seen a 1.2 to 1.4 million budget for what was proposed to be built here. If this plant received a million dollars a year, that would go a long way in defraying the costs at this plant.
- John Kelly stated unfortunately there are a lot of issues that go along with these discussions. But the reality is there are 10 million gallons that have to go somewhere and the market will drive the cost up for disposal and options will be more limited, and will cost the homeowner more.
- Jay handed out a letter he wrote regarding the Tri-Town Plant and stated he has watched this Board struggle with their decisions. It is his opinion that the towns and the people involved in the decision making of this plant are missing the boat. They have a treatment plant already here, but it is not a sewage plant. The tank space is already here as well as the equipment. It doesn't make sense to me to demo this plant. We have more wet well space than any treatment plant I have ever worked in, including 75 million gallon a day treatment plants. Why are you going to tear all of that up?
- The Board reviewed Jay's letter.
- John Kelly stated unfortunately, it is much of a political discussion at this point, and he would be happy to pass Jay's letter on to the Orleans Board of Selectmen for review. The re-use of this site is limited, due to the box turtle habitat. Unfortunately there has been discussion with a number of the decentralized options, step in particular, that doesn't treat solids. They don't want a treatment plant that treats solids because it provides the opportunity to treat more than the step effluent. There are obviously people who don't want to use this site for anything. You have other people who want to use the site but limited to effluent but no solids. That means the septage has to go somewhere else.
- Jay stated there have been many days we have had 90,000 gallons days on a Monday or Tuesday because Yarmouth was not accepting septage.
- Martin McDonald stated at this point, Orleans, Eastham and Brewster assume that the contract is over in a couple of years.
- John Kelly stated that's right, and the issue becomes everything has to be done prior to the end of the contract.
- Jay stated at that point you wouldn't need a District. We take septage now from Harwich, Chatham, Truro, Wellfleet and Provincetown.

- Charles Sumner stated maybe there's a discussion about the fact that Orleans is going to do something here ultimately and there are some components of this plant that we should maintain.
- John Kelly stated this plant was overdesigned for the three towns by 50%.
- Jay stated and right now that is a good thing in my opinion.
- John Kelly stated the three towns have the financial obligation of this plant but the entire Lower Cape benefits. We have never been able to get the other towns to join the IMA and have the financial commitment. When things are not going well, we can't rely on your cash flow to sustain it. For all the good things the plant does, it is a financial liability trying to maintain it. Obviously when the permit is up there is no denitrification.
- Jay stated denitrification is easily addressed. Orleans could take care of its own wastewater stream and supplement it hugely by taking on the accounts they take on now.
- Martin McDonald stated to Jay without a ball park number it doesn't mean much.
- Jay stated he couldn't give a ball park number but I can definitely tell you it is nowhere near the \$350 million dollars that was presented to put together the new plant.
- John Kelly stated that number has been grossly inflated.
- Jay stated the last upgrade here, we added two buildings and two unit processors. You would probably have to add two or three unit processors, denitrification, either sequential batch reactor which could fit where our RBCs' are or extend the RBC'S train. The cost would be approximately \$15 million dollars.
- John Kelly stated we should attached Jay's letter to today's Minutes.
- Charlie Sumner stated he will share Jay's letter with his Board of Selectmen and it would be a good conversation to have with the three Boards in October.
- John Kelly stated that Jay and Cyndi should work on the list of questions and concerns from the employees as well as the haulers for the October 16<sup>th</sup> Board of Managers Meeting. We will have additional attachments that we will give the three Boards of Selectmen at their meeting the following week.
- **Flow** – August 2013 was the best gallon month in the past five years.

7. The Board reviewed the District's bank balances.
8. A motion was made by Martin McDonald to approve Treasury Warrant No. 1 for payment. This motion was seconded by Charles Sumner and unanimously approved and passed.
9. Any items for future Agendas:
  - Discussion and vote on carbon replacement
10. A motion was made by Martin McDonald to adjourn the meeting at 10:05 a.m.. This motion was seconded by Charles Sumner and unanimously approved and passed.

Respectfully submitted,



Cyndi Bachman  
District Secretary



To: Tri-Town Board of Managers and their Boards of Selectman  
From: Jay Burgess, Plant Manager Tri-Town Plant

9/11/2013

I've watched as Orleans has struggled with its decision on how to best handle its nutrient problem in the form of septic nitrogen. Orleans has a treatment plant, but it does not treat sewage. The only plan that the town seems to have been able to approve is to DEMO the treatment plant that it has now, AKA Tri-Town.

The Tri-Town plant has equipment that is used all over the world for sewage treatment. Most, if not all towns that are struggling to keep up with the growth of their community and have a treatment plant do not tear them down; they upgrade and retrofit them.

It is my belief that this plant has many features that would give it a jump start in sewerage part of the town. It has more tank space than would be designed for a town this size. Sure some equipment needs upgrading, but that is millions of dollars cheaper than starting fresh. The town's own 2005 study showed that the sand filters could be used for denitrification and the dewatering equipment can be upgraded to last indefinitely.

The land is already permitted and still has room for future expansion. The existing septage revenue of one million dollars a year would go a long way in paying for the annual operating expenses. The dewatering system at this plant is as good as it gets in the industry, which would bode well for any satellite or cluster systems that might pop up in town.

In short, it is my professional opinion that this asset is being overlooked in the attempt to clean up Orleans waterways. The existing septage plant could be transformed into a combination sewer and septage facility at a much more reasonable cost than current plans that have been mentioned.

By the way, this all can be done without a drop of water hitting the Namskaket Marsh system.

30M, Tri-Town

11 Sept 2013

Bev Carney, Orleans Citige

My Health Agent briefly reported JP Noonan of Eastham's recent mobile transport of pump-outs pushed into a 10,000 gallon tanker & hauled to Carver.

When the bay doors close here next September, you all will be scrambling for some institutional accountability; with transfer sitings & accidental spill plans; shoring up gaps in local tracking of septic & grease flows; user reminders to schedule regular maintenance; and any means to control market costs & insure safe conditions of transport, treatment & discharge.

Next weekend is the big our waters celebration for the Orleans Pond Coalition & District Towns.

Sadly, the region's top experts said thanks but no thanks to "Farewell Tours" of Tri-Town.

Tell the homewagons that these are their last seasons here so they at least can plan accordingly.

bc

## Meeting Notes

### Kick-Off Meeting

#### Tri-Town Septage Facility Decommissioning Report



**Stantec**

Date/Time: August 28, 2013 / 10:00 AM  
Place: Tri-Town Septage Treatment Facility  
Next Meeting: October 15, 2013  
Attendees: John Kelly, Orleans Town Administrator  
Tom Daley, Orleans DPW Director  
Martin McDonald, Eastham Selectman  
Cyndi, Secretary  
Jay Burgess, Chief Operator  
Steve, Assistant Operator  
Ron Collins, Orleans Facilities Director  
Joe Uglevich, Stantec  
Steve Calabro, Stantec  
Garry McCarthy, Stantec

Absentees:

Distribution: All stakeholders listed above

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#### Item:

#### Action:

##### Introductions

As Chairman of the Tri-Town Board of Managers, John Kelly made introductory statements on the intent of the Board moving forward. All attendees introduced themselves.

##### Stantec Project Scope of Services

Garry McCarthy reviewed the Project Scope and a proposed Table of Contents for the Action Plan Report

Existing Documentation – Jay Burgess made original plant and upgrade plans available to Stantec as well as an equipment inventory list, O&M Manual and basic information on the groundwater wells.

Stantec requested that Jay or Steve provide additional water quality data for the groundwater wells such as the annual water quality testing results.

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## Stantec

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The Town of Orleans has received a MEPA Certificate for their Comprehensive Wastewater Management Plan (CWMP). The Certificate outlines some requirements for the construction of a new WWTP at the current site of the Tri-Town Septage Treatment Facility. The Certificate needs to be studied to determine if there are any requirements related to the demolition of the existing treatment facility.

George Meservey, Orleans Planning Director can provide a copy of the Certificate. - Mr. Meservey provided the document to Stantec on August 28, 2013.

The involvement of the Cape Cod Commission was also discussed. The CCC has issued a Development of Regional Impact document regarding the town of Orleans' CWMP. The DRI needs to be studied to determine if there are any requirements related to the demolition of the existing treatment facility.

George Meservey, Orleans Planning Director can provide a copy of the DRI. - Mr. Meservey provided the document to Stantec on August 28, 2013.

The opportunity for equipment salvage was discussed. Stantec stated that the initial step is to document the equipment inventory and then to make that information available to interested parties. The Action Plan will include an equipment inventory list with options to market the equipment to potential interested parties. There was some discussion of the difficulty and cost to properly remove items from the facility. Most equipment is beyond its useful life which will limit salvage value. Consider allowing contractors to bid the project in such a manner that they are responsible for salvaging most of the equipment and materials and thus the Tri-Town benefits from reduced bid amounts.

Based on input from the operations staff, it is expected to take 6 to 8 weeks to process all waste material from the site after the final septage loads are received at the plant.

Critical demolition activities will include demolishing the complete concrete foundation of the facility. This will include excavation to depths of 30 feet. Overland Way will remain As-Is. Existing groundwater monitoring wells shall remain in place (total of 8, 4 for the Town and 4 for the USGS). 120V power shall remain on site to power the existing sampling pumps in the USGS groundwater monitoring wells.

The separate Compost Facility shall also be demolished as part of the project. The bid documents could request a separate price for this item and the Town of Orleans would pay for this separately. Jay mentioned that the power for the Compost Facility is sourced from the

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## Stantec

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treatment plant. There is also a diesel fuel tank on this site and potential drainage issues that will need to be addressed.

Stantec agreed to consult with a demolition contractor to determine if there is any potential cost savings to blast the existing concrete foundation structure as opposed to a jackhammer method. If there is a cost savings then this method may be considered. Otherwise, the jackhammer method will be used as it appeared that local authorities, including the Orleans Building Inspector are not familiar with blasting activities. Blasting activities are not typical on the Cape due to the prominent sandy soils.

Project schedule was discussed as it relates to Town Meeting for each of the communities and other key dates. Working the schedule back-in-time, the following dates were identified:

- May 31, 2015 is the end date of the current agreement and thus all demolition and restoration work should be completed prior to that time.
- October, 2014, communities could hold Special Town Meetings to appropriate funding for the plant demolition.
- September, 2014 is the latest date when final bids need to be received from contractors on the project
- May, 2014, communities could hold a Special Town Meetings to appropriate funding for engineering fees. (This date provides insufficient time to complete final design and bidding activities by September 2014. Consider an earlier start for engineering.)
- November, 2013, joint meeting of the Boards of Selectmen from Brewster, Eastham and Orleans where the Final Tri-Town Septage Facility Decommissioning Report will be presented.
- October 16, 2013, proposed date of the next Tri-Town Board of Managers meeting.

**Stantec**

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- October 11, 2013, agreed upon date for submittal of the Draft Tri-Town Septage Facility Decommissioning Report.

The meeting adjourned at 11:30 AM

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

**STANTEC CONSULTING SERVICES INC.**

A handwritten signature in black ink, appearing to read 'G McCarthy', with a stylized flourish at the end.

Garry McCarthy  
Principal  
garry.mccarthy@stantec.com

c.