

2015 JUN 16 AM 9:52

A meeting of the Town of Barnstable's Hyannis Water Board was held on May 12, 2015 at 3:15 PM in the Growth Management Conference Room, 367 Main Street, 3rd Floor, Hyannis, MA.

In attendance were: Steve O'Neil, Tom Holmes, Deb Krau, and Jonathan Jaxtimer.

Staff present: Hans Keijser, Supervisor, Water Supply Division; Dan Santos, Director, Department of Public Works; Robert Steen, Assistant Director, Department of Public Works; Ruth Weil, Town Attorney; and Charles McLaughlin, Assistant Town Attorney.

Also present:

John Marcin, United Water; Mark Lavoie, United Water; David Kanyock, Barnstable Schools; Mary Czajkowski, Superintendent, Barnstable Schools; Geoff Spillane, Cape Cod Times; Scott Michaud, Cape Cod Commission; Lydia Thompson, Massachusetts Department of Environmental Protection; and Jonathan Hobill, Massachusetts Department of Environmental Protection.

A quorum being present, Chair O'Neil called the meeting to order at 3:20 PM.

A motion was made and seconded to approve the agenda.

VOTE: Unanimous in favor. The Agenda is approved.

A motion was made and seconded to approve the 4/15 meeting minutes.

VOTE: Unanimous in favor. The 4/14/15 meeting minutes are approved.

Operations Report – Lavoie states that United Water staff are continuing with night flushing to keep the water quality and flooding complaints to a minimum. He reports that they are also assisting Barnstable County with sampling for perfluorooctane sulfonate (PFOS) and the Massachusetts Department of Environmental Protection (MassDEP) with sampling for 1,4-dioxane. Manganese samples came back below the Massachusetts Office of Research and Standards Guidelines (ORSG) limit of 0.30 parts per million due to the limited use of the Straightway well. DEP approved the manifold to blend water from the Airport and Mary Dunn wells. The installation is expected to start soon. Lavoie reports the live tapping of the 16-inch water main was started today. Keijser adds that no preassembly could be done due to the complexity of the manifold system and keeping the Mary Dunn Treatment Plant on-line.

Abatements-

David Kanyock, Barnstable Public Schools, 549 West Main Street, Hyannis, System Development Charges for the domestic and fire sprinkler services to the Early Learning Center (ELC)- Kanyock explains that the building will benefit children in the Barnstable community ages 2.9 to 5 years old, who have learning or other disabilities. There will be no charge for attendance. He explains they are asking for an abatement to waive the system development fees.

Superintendent Czajkowski explains the ELC will serve students primarily from Hyannis West, but also others from Barnstable that are required to be accommodated. There will be six classrooms serving about one hundred students.

Holmes states that the school belongs to the Town of Barnstable, not just the village of Hyannis, and the school department should therefore cover payment of the fees. Krau mentions a challenge of dichotomy where the Town of Barnstable's benefit of this ELC is at the expense of the residents of the Hyannis water and fire districts. O'Neil adds that the fees are associated with development and are an upfront cost. The fee structure is set up to keep rates level and also provide for annual system improvements.

A motion was made and seconded to deny the abatement.

VOTE: Unanimous in favor. The abatement is denied.

UCMR3, test results, update-

Date and background- Keijser explains that the EPA has mandated unregulated contaminants to be tested by all large water suppliers. This is to help decide if it is necessary to develop a standard for regulation.

Keijser adds that there have been two rounds of testing, first in the Fall of 2013 with no issues although some results showed minimal contamination. The second set of samples taken in the Spring of 2014 showed results of 1,4-dioxane over the ORSG limit of 0.30 parts per billion (ppb). 1,4-dioxane results from a sample at the tap of Maher Treatment Plant was 0.37 ppb, and PFOS results from samples at Mary Dunn 2 and 3 wells were greater than 0.2 ppb.

DEP discussed a response to these levels, including follow up testing at each well, in January 2015. This resulted in the shutdown of the Maher Well #2 because the 1,4 Dioxane sample exceeded the ORSG limit. The Straightway well with similar results was also shut down.

Barnstable County conducted follow-up testing for PFOS at Mary Dunn, resulting in the Mary Dunn wells 1 and 2 going off line because the samples exceeded the EPA health level.

Presentation by MassDEP and the Office of Research and Standards Guidelines (ORSG) - Hobill explains that the samples are taken from entry points into the distribution system, and not from individual wells. The sampling will continue; the last sample date was May 1st and those results are expected soon. Yarmouth UCMR3 sample data was shared with the DEP; they are okay. He adds that this is a Cape-wide issue and that the chemical sources of the contaminants are to be phased out eventually. Hobill mentions that the Hyannis Water System has been very responsive to results exceeding the health limit level. He says that Barnstable County has been sampling and will share their results at a meeting next Tuesday. The airport has also agreed to sample for 1, 4-dioxane. PFOS is not a regulated contaminant, but 1, 4-dioxane is regulated. The airport is a suspected source of 1, 4-dioxane because of its history of solvent use. If it is found that this is not the case, sampling will continue in areas up-gradient of the wells. Keijser adds the history of West Main Street is likely the source of contamination for the Straightway well. Hobill says the plan is to continue with sampling, but he is unsure if any samples will be taken until September.

Thompson explains the risk analysis conducted regarding the contamination issue. 1, 4-dioxane is found in many consumer products. PFOS and other perfluorinated compounds (PFCs) are found in fire fighting foams, stain resistance and surface coatings; PFOS has been largely phased out of production.

Thompson mentions that nine (9) wells have been tested over the last year and a half for PFOS, manganese, and 1, 4-dioxane. The risk analysis is based on worst-case scenarios: an infant and a constant exposure for over 70 years. According to the risk analysis, the short term exposure to 1, 4-dioxane is okay, but there needs to be a long term solution.

Thompson adds the PFOS results slightly exceed the worst case scenario, but because actual exposure was less than one year, it is not an acute health threat. There is limited information regarding other PFCs. The risk assessment would recommend that the wells be taken offline- and therefore supports the Town's action to take the wells offline. Adverse health affects are now unlikely and even with the worst case scenario there is no high risk associated with this limited exposure.

McLaughlin asks if there have been any discussions regarding mitigation; Hobill responds that the county is conducting an investigation. Santos adds that the County is pursuing carbon filters as a solution to the groundwater contamination. The Town is looking at activated carbon treatment units to treat the drinking water and to design the installation of these filter units. Payment and reimbursements will be determined at a later time.

Krau mentioned an issue with perchlorate from the Barnstable County Fire Training Academy five or six years ago that cost them at least \$500,000.00. She states that the Hyannis Water Board had pushed for relocation of the academy at that time, as the same wells currently affected by the contamination had also been affected then. The water quality study had determined the cause of that contamination to be the fire training academy as well as the lack of sewers in the area. Krau adds that the airport was reluctant to add the de-icing pad several years ago as well. She says it is unfortunate that the residents of Hyannis and the Hyannis Water Board have to pick up after others.

McLaughlin added that because of the increase in PFOS and 1, 4-dioxane, has there been any mitigation or sample testing closer to the fire academy to determine concentration of the contaminants in the groundwater and soils; Hobill responded that there has not been a lot of data, only three sampling events, and that because of the feasibility of location and remediation, an investigation is currently underway. McLaughlin asks what, under unlimited resources, would be the ideal sampling schedule; Hobill responds that treatment options would require more sampling to confirm or deny that the treatment is working. He adds that they are looking for quarterly or twice-quarterly sampling. Steen adds that 1, 4-dioxane is variable and perhaps PFOS as well, in their groundwater plumes. Hobill responds that that information is unknown. Thompson adds for clarification that 1; 4-dioxane is not the same as dioxin, as it had been called for ease of conversation.

Hyannis Water System action plan- Keijser mentions that the Department of Public Works Director requested a contingency plan back in December/ January and this plan was developed using a five-year record of pumping data and maximum day demand. The wells need to pump five million gallons per day to keep up with the maximum summer demand. Water capacity capabilities (handout given) without Maher 2 and using only Maher wells 1 and 3, Mary Dunn well 1, Airport well and Hyannisport / Simmons Pond wells will yield about 4.58 million gallons per day. This is not enough for the maximum summer demand like the July 4th weekend. Keijser adds that United Water and DPW engineers are working on an interconnection with the Town of Yarmouth to replace the yield from the Maher 2 well and be able to meet demands. The other option is the use of carbon filters for the Mary Dunn Wells 1 and 2. Keijser adds that they must consider redundancy in case of mechanical, electrical or controls breakdowns, to be able to meet demand. He reports that the plan is to pursue both the interconnection and the carbon filters. He adds the manifold to be installed will blend water from Mary Dunn 3 and the Airport with water from Mary Dunn 1 and 2 before it enters the distribution system.

Keijser mentions that the Yarmouth interconnection is in the design process, and that it still needs DEP approval. He adds to be working through the administrative process with the Town of Yarmouth and the property owners over which whose land will go the temporary water lines. Keijser mentions the carbon

filter designs and permits need to be filed with the DEP, conservation, and the State of Massachusetts endangered species agency and should be completed before July.

Krau mentions the 70% yield from the Airport well, Keijser responds that the Airport well was treated for iron with pantonite two years ago.

Yarmouth Interconnect for the Maher Treatment Plant- Keijser reports that the water will need to be purchased and that the operating budget for fiscal year 2016 includes an additional \$160,000.00 for water purchase per year (handout given). Krau asks if the \$744,000.00 is budgeted, Keijser responds that that is unknown. O'Neil adds that reimbursement should be assumed. Keijser mentions the rental of the carbon filter units is for one year, which gives time to evaluate the treatment or decide if other treatment options are necessary to pursue. Krau adds there are more than 7,300 water accounts which relates to about \$23.00 per customer per year to buy water from the interconnection, not including the carbon filters. Keijser adds the final cost of the water is still in negotiations.

Krau mentions that many of the wells are challenged and that the residents should know the quality of the water is being protected. She adds that the Hyannis Water Board should be more proactive in letting residents know this. She asks what will need to be done to be able to use the water from the wells again. Keijser responds that the contaminants need to be below the ORSG limits or the water or wells will need to be treated. Krau asks how to treat 1, 4-dioxane, Hobill responds that first the source needs to be found. Krau mentions the Straightway and Maher wells could be enhanced by sewerage in the areas, Hobill mentions that the Straightway well is very deep and may be influenced by more than the immediate area.

Keijser adds the challenge with emerging contaminants is that there is little known information about them. He also adds that laboratory equipment is much improved and can detect contaminants in a great more detail than before. The challenge is knowing what these detections mean relative to Public Health.

Krau asks if the budget can cover all of these costs, Keijser responds yes, but that it limits what is being put into the reserve funds. O'Neil adds that assuming the carbon filters' cost has bundled all work together, the actual cost may change as needs change over the years. Santos adds that there are certain one-time costs and other annual recurring costs. O'Neil mentions forecasting long-term costs. Hobill adds the continuous monitoring with sample testing.

Water Quality Report (handout given)- Keijser reports the water quality report was also sent to DEP. Input was provided to make the language more clear regarding what is an unregulated contaminant and why certain things are tested. He adds the language will be added and the report will be reprinted.

Krau adds they are fortunate to allow for mixing sources via past capital expenditures and the ability to maneuver water throughout the system. Keijser mentions he needs a tentative approval of the report, and that the EPA language will change. Krau suggests the water testing language should be made more prominent regarding when the testing occurred to emphasize that the water issue is current and was not there last year. Keijser notes the language change and will send the updated version to the board members.

A motion was made and seconded to approve the water quality report with changes.

VOTE: Unanimous in favor. The water quality report is approved with changes.

Hans - update-

Open house- tour and nature walk in conjunction with the Barnstable Land Trust, Saturday, May 9th at 10AM, Straightway Treatment Plant at Straightway, West Hyannisport- Keijser mentions last week's tour was successful. He says about twelve people showed up from Hyannis as well as other villages of Barnstable. The walk started with a tour of the Treatment Plant, Pump Station and Water Storage Tank and continued with a guided nature walk to Simmons's Pond and back. Keijser adds there is a plan to do a similar tour in the Mary Dunn area next year, possibly the Straightway area again next spring.

Construction projects-

Main Street, West End Rotary- Keijser reports there was a major shutdown at night and that the work continued into the early morning hours. The rest of the Main Street job is scheduled to happen after Labor Day and involves replacing the water main from Seat Street to the West End Rotary.

Scudder Avenue, progress- Keijser reports that the project started at Hyannisport and is progressing toward the old fire station where it will stop for Memorial Day. Work will resume in the fall from Craigville Beach Road to Straightway. He adds anticipated challenges include swampy ground and the crossing of a culvert with high groundwater levels.

Air Stripper, progress- Keijser mentions the carbon filter and that fabrication will occur off site over the summer with everything to be in place and on site by thanksgiving. Work will take place over December and January.

Cleaning and lining 16-inch water main on the Airport- Keijser reports that work is currently underway by the runway and should be completed next week.

Straightway fence construction- Keijser mentions there was a delayed start to the project but that it will happen soon.

Meeting was adjourned at 4:43 PM.

Respectfully submitted,

Samantha Santos

DPW, Water Supply Division –Temporary Administrative Assistant

Materials presented at meeting:

- Meeting Agenda May 12, 2015 (presented by: T.O.B.-DPW, Water Supply Div.)
- Meeting Minutes for approval 4/14/15 (presented by: T.O.B.-DPW, Water Supply Div.)
- H.W.B. Monthly Report, April 2015 (presented by: United Water)
- FY '15 Pumping Projection and Billed and Received Revenue spreadsheets, dated 05/08/15 (presented by: Hans Keijser)
- Water Usage Abatement/ Fee Adjustment Request Staff Report, Barnstable Public Schools0 D. Kanyock (presented by: Hans Keijser)
- Hyannis Water System Water Production Capabilities spreadsheet dated 05/05/15 (presented by: Hans Keijser)
- Copy of Town Council Meeting Agenda May 7, 2015 with item # 2015-146 details (presented by: T.O.B.-DPW, Water Supply Div.)
- Draft of Operating budget fiscal year 2016 (presented by: T.O.B.-DPW, Water Supply Div.)
- Copy of Letter from Barnstable Town Manager to Yarmouth Town Administrator, dated 04/29/15 (presented by: Hans Keijser)
- Newspaper clippings (presented by: Hans Keijser)
- Annual Water Quality Report (presented by: United Water)

