

**MINUTES OF THE
NORTH SHORE WATER COMMISSION
MEETING OF Wednesday, November 9, 2016**

A meeting of the North Shore Water Commission was held at the Filtration Plant, 400 West Bender Road, Glendale, Wisconsin on Wednesday, November 9, 2016.

Meeting was called to order at 8:00 A.M. by Mr. Edlebeck.

Present: John Edlebeck, Chair; Mike West, Secretary; Dave Eastman, Member.

Also present: Eric Kiefer, Plant Manager & Recording Secretary

Absent: Paul Boening, Alternate for Whitefish Bay; Scott Botcher, Alternate for Fox Point; Rachel Reiss, Alternate for Glendale

MINUTES

It was moved by Mr. Eastman, seconded by Mr. West, and unanimously carried to approve the minutes for the meeting held October 12, 2016.

MONTHLY REPORT OF PLANT OPERATIONS

Mr. Kiefer provided the Commission with the monthly report of operations. During his presentation, Mr. Kiefer noted that pumpage in October 2016 was lower than October 2015. There was a brief discussion about how flows have dropped throughout the years and the report was placed on file without any motion.

ANNUAL OPERATING BUDGET

Mr. Kiefer presented the monthly financial reports and they were put on file without motion.

MONTHLY BILLS

It was moved by Mr. West, seconded by Mr. Eastman, and unanimously carried that the following bills and estimated invoices be approved and authorization was given to the Fiscal Agent to make such payments:

<u>Vendor</u>	<u>Amount</u>
A.C. Engineering (repair of circuit breaker and preventative maintenance for transformer)	6,487.50
BMO Harris Bank (credit card)	256.66
-- FedEx Office (printing services): \$141.56	
-- Google (monthly charge for apps): \$54.16	
-- Siteground (domain registration renewal): \$14.95	
-- Straight Talk (monthly phone plan - Foreman): \$45.99	
Clark Dietz (general engineering services)	760.00
Diversified Benefit Services (Section 125 Plan administration)	95.93

Earthlink (Bender phone)	148.00
Eurofins (cryptosporidium analysis)	780.00
Expeditors, Inc (televise storm sewer)	1,000.00
Fuchs & Boyle (legal service)	321.75
Grainger (general hardware, floor stripping and waxing supplies, socket, custodial supplies, tape, pressure transducers, and towel)	1,325.73
Great America (lease payment for copier/printer)	100.00
Hach (lamp and photocell assemblies for Hach 1720D instruments)	4,543.42
Hawkins (treatment chemicals: aqueous ammonia)	444.00
Idexx (collection vessels)	669.10
L&S Electric (repair of VFD and keypad)	849.00
Liesener Soils (top soil)	310.00
Minnesota Life (employee life insurance)	121.00
Northern Lake Service (analysis of water samples for compliance monitoring)	67.00
Office Copying Equipment (maintenance payment for copier/printer)	19.96
Rotroff Jeanson (accounting services)	950.00
T-Mobile (mobile internet)	31.05
Time Warner Cable (internet services and Klode phone)	391.01
US Cellular (cellular phone)	4.25
Village Ace Hardware (hardware, hop head, surface protectors, and grass seed)	105.15
Village of Fox Point (gasoline)	88.68
Village of Whitefish Bay Water Utility (Klode water)	134.70
We Energies (Bender Electric)	14,084.53
We Energies (Bender Gas)	344.31
We Energies (Green Tree Electric)	16.12
We Energies (Henry Clay Electric)	16.93
We Energies (Klode Electric)	3,733.37
We Energies (Klode Gas)	9.57
Wisconsin State Lab of Hygiene (fluoride analysis)	25.00

SUB-TOTAL \$38,233.72

Maintenance Reserve

SUB-TOTAL \$0.00

TOTAL \$38,233.72

STATUS OF CAPITAL IMPROVEMENT PROJECTS AND APPROVAL OF PAYMENTS

Mr. Kiefer explained there was progress with the Chemical Feed Upgrade Project in regards to plumbing. He also explained that plant staff completed the valve replacement on High Service Pump #3 which required a plant shutdown. Mr. Kiefer praised his staff for doing a great job.

It was moved by Mr. Eastman, seconded by Mr. West, and unanimously carried to approve the payment request as presented in Mr. Kiefer's memoranda dated November 9, 2016 in the amount of \$2,964.09 for the Chemical Feed Project and \$2,903.27 for the Valve Replacement Project using the current capital allocation rates.

CHEMICAL QUOTATIONS

Mr. Kiefer presented his recommendations for acceptance of chemical quotations. He mentioned that all unit costs are the same or lower than last year. Some chemicals reduced by 20% from last year. Since chemical production is energy-intensive, Mr. Kiefer believes that low oil costs are driving the production costs down.

It was moved by Mr. West, seconded by Mr. Eastman, and unanimously carried to accept the chemical quotations as noted in Mr. Kiefer's memo dated November 9, 2016.

Accepted Quotations:

Univar: ammonium hydroxide (19%) - \$0.199/lb
Alexander: sodium hypochlorite (12.5%) - \$0.694/gal
Rowell: hydrofluosilic Acid (23%) - \$0.210/lb
Alexander: liquid Aluminum Sulfate - \$275/dry ton
Hawkins: phosphate (LPC-132) - \$0.440/lb
Hawkins: polymer (Flocculation Aid) - \$0.65/lb
Nalco: polymer (Mussel Control) - \$1.11/lb

LETTER OF SUPPORT FOR DR. CHEN'S RESEARCH PROPOSAL

Mr. Kiefer explained that Dr. Chen of UWM has developed a sensor that can be used to detect waterborne contaminants. Consequently, Dr. Chen will be submitting a proposal to demonstrate how these sensors can work in a distribution system. Mr. Kiefer was asked to help with the project by providing water utility advice. He was also asked to place the sensors in Fox Point, Glendale, and Whitefish Bay. Mr. Kiefer convinced Dr. Chen to alter the scope of the project to put the sensors in a building instead.

Mr. Edlebeck asked where the evaluation would take place. Mr. Kiefer said it is now anticipated to take place at the Global Water Center, UWM, or at another facility.

Mr. West how much time would this effort require. Mr. Kiefer said that he would volunteer his time as needed, but didn't think it would take more than 40 hours per year.

The Commission discussed the concept of water sensors installed in the distribution system. It was the consensus of the Commission that Mr. Kiefer should not allow that testing to occur in Fox Point, Glendale or Whitefish Bay.

Mr. West briefly left the room. During his absence, Mr. Edlebeck moved to approve the letter of support drafted by Mr. Kiefer dated November 9, 2016 with the condition that Mr. Kiefer's involvement does not go beyond providing water utility advising and that the sensors are not tested in the distribution system. It was seconded by Mr. Eastman. Mr. Eastman and Mr. Edlebeck voted for the motion, and it carried. Mr. West re-entered the room after the vote.

SOUTHWEST RESERVOIR INSPECTION

Mr. Kiefer provided the Commission with a report regarding the condition of the southwest (SW)

reservoir. Mr. Kiefer discussed the content of the report using a system map as a visual aid.

Mr. Kiefer also provided the Commission with a draft of SEH's inspection report. He called the Commission's attention to the preliminary opinion of probable cost for bringing all 4 reservoirs up to code--approximately \$2.2 million.

Mr. Kiefer explained that he did not find it necessary to keep all 4 reservoirs in service. If the NW and SW reservoirs could be "mothballed," the overall project would drop in cost.

Mr. Edlebeck asked Mr. Kiefer why the NW reservoir should be abandoned if there is nothing wrong with it. Mr. Kiefer explained that having just 2 reservoirs would be more than sufficient. Furthermore, it would ultimately reduce the cost of the project.

Mr. Kiefer called the Commission's attention to a graph of annual pumpage from 1965 to 2015 provided in his report. In the early 1990's, there was a large reduction in water demand. The trend suggests there is continuing decline in water demand as we head into the future. It was Mr. Kiefer's conclusion that maintaining extra reservoir storage capacity would not be necessary, especially now that demand has greatly diminished.

Mr. West commented that if the NW and SW reservoirs are mothballed properly, they could be put back into service--after the necessary repairs and improvements are made to bring them up to code.

Mr. Kiefer went on to recommend that SEH provide additional services to determine if the NW and SW reservoirs can be safely abandoned and to develop a 5-year capital improvement plan to implement the necessary repairs and improvements.

After discussion of the topic, it was moved by Mr. West, seconded by Mr. Eastman, and unanimously carried, to authorize Mr. Kiefer to approve additional services so the engineer can study the mothballing of the NW and SW reservoirs and to develop a capital improvement plan for contemplated reservoir improvements.

GLENDALE'S REQUEST TO INSTALL A REMOTE METER BETWEEN GLENDALE AND FOX POINT WATER UTILITIES AND CLARK DIETZ'S ENGINEERING REPORT

Mr. Kiefer provided the Commission with a report from Clark Dietz which describes the costs and benefits of installing an interconnect meter (and all associated construction) between Fox Point and Glendale near W. Bradley Road. Mr. Kiefer briefly went through the report and explained that Mr. Eastman requested for this item to be placed on the agenda.

Mr. Eastman explained that the interconnection would benefit the systems in water age and fire flow. Given the other projects on the horizon, Mr. Eastman explained that this project is not as high of a priority as the anticipated reservoir project.

Mr. Kiefer asked for direction as to when the interconnection project should be completed. Mr. Eastman responded by saying that it would depend on the reservoir project.

Mr. Kiefer expressed his intention to exclude this project from the 5-year capital improvement plan because the reservoir work is higher priority. Mr. Eastman commented that is understandable given the

situation with the reservoir; however, he would like for the Commission to complete the project when the other high priority projects are completed.

Mr. Edlebeck commented that he would support Fox Point and Glendale in this project.

Mr. West commented on cost of the interconnection and thought it may be lowered if other alternatives are investigated. Mr. Eastman suggested that he go back to Clark Dietz to include alternatives in their report. When that report is finished, it would be brought back to the Commission.

It was the consensus of the Commission to wait for the revised report before taking any further action on the matter.

MANAGER'S REPORT

1. Plant staff discovered 2 small sinkholes in the southwest area of the Bender facility. After televising the sewer in the area, plant staff does not believe sinkholes were caused by a storm sewer failure. Plant staff intends to fill in sinkholes and monitor the situation over time.

During discussion of this item, Mr. Kiefer explained that up until a month ago, he was unaware that the Commission owned the storm sewer that takes the plant overflow discharge to a nearby creek. It was Mr. Kiefer's understanding that the Commission's overflow connected to a Glendale storm sewer.

Mr. Eastman explained that all of his records indicate that the storm sewer belongs to the Commission.

Mr. Kiefer responded by saying that he discussed the topic with a retired Commission employee. That employee also believes the line belongs to Commission. Mr. Kiefer explained that he accepts that the line belongs to the Commission, but was completely unaware of it until his investigation.

He went on to further explain how it will be important to understand more about the stormwater drain since the reservoir overflow will ultimately discharge to this line.

Mr. Eastman suggested that Mr. Kiefer contact Mr. Fuchs for assistance.

2. Wisconsin Department of Natural Resources and SEH engineers met at the Commission to discuss the condition of the southwest reservoir and alternatives for moving forward. Until further notice, the southwest reservoir is out of service and cannot be used.
3. Plant staff is draining the southeast reservoir so it can be inspected before the end of the year. Plant staff needs to know the condition of this particular reservoir before plans can be developed for handling the southwest reservoir.
4. Filters #1 and #8 leak an excessive amount of water into the reclaim basin. At low flow rates, they can no longer be operated.
5. A section of siding on the garage fell off during a recent wind storm. Because of the condition of underlying fascia and roof, plant staff believes it will need a new roof and siding next year.

6. AC Engineering repaired the main utility breaker that failed earlier this year; the breaker was re-installed and tested at the Bender facility. It was left in service while the other breaker was put into storage in case the breaker fails again.
7. Plant staff started up cryptosporidium testing again to comply with WDNR regulations. Monitoring will be conducted monthly over the next 2 years.

NEXT MEETING

The next regular meeting was scheduled for Wednesday, December 14, 2016 at 8:00 AM.

ADJOURNMENT

It was moved by Mr. West, seconded by Mr. Eastman, and unanimously carried to adjourn at 9:20 A.M.

Submitted by:



Eric Kiefer, Plant Manager and Recording Secretary

11/10/2016

Date