

MINUTES
City of New Berlin
Utility Committee Meeting
Tuesday March 28, 2006

Members Present: Alderman Gallagher, Alderman Ament, Alderman Harenda, Commissioner Jim Morrissey and Commissioner Bob Dude

Others Present: Mayor Chiovatero, Ray Grzys (Director of Utilities & Streets), Rick Johnson (Utility Manager), Mark Blum (City Attorney), Steve Schultz (Ruekert & Mielke), & Sue Hanley (Office Coordinator Utilities & Streets)

Chairman Gallagher called the meeting to order at 5:02 p.m. declaring a quorum with all members present.

ITEM UT B-06 Approval of minutes from February 28th meeting

Motion by Alderman Ament to approve minutes from February 28th meeting. Seconded by Commissioner Morrissey and upon voting the motion passed 3-0, with Alderman Harenda and Commissioner Dude voting present since they did not attend the meeting.

ITEM UT 06-06 Request Borrowing of Funds to Finance Design and Construction needed to meet the Radium Consent Order set by the DNR

Director Grzys read the requested action to recommend to Council to approve the expenditure of \$3,459,700 of Water Utility funds to cover the cost of complying with the Radium Consent Order for Pumpstations # 3, 5 and 7.

He said the quote received from Ruekert & Mielke to cover construction cost, engineering, legal, administration and contingencies for a total cost of \$3,459,700, and he gave a breakdown of the costs. The source of funds we are looking at are the balance of the Forest View borrowed funds \$990,000 and a loan from the Sanitary Sewer Utility in the amount of \$2,669,700.

Director Grzys read the Rationale. The Radium Consent Order deadline date is December 8, 2006. The Utility has held off as long as possible before requesting money to be transferred to finance the project. There is still a chance we could receive Milwaukee water for the remainder of the service area; however, we cannot assume any longer. Therefore, I requested the cost for Ruekert & Mielke to cover the entire project of bringing the three pumping stations into compliance and to include engineering and contingency. The Utility is looking at funds from other sources to help keep borrowing down. Therefore, the Utility is recommending the transfer of funds from the Water Utility CIP account with the balance to be borrowed from the Sanitary Sewer Utility.

Director Grzys said that there is a letter in the packet from the City Attorney about the possibility of using RCA funds. The letter from the Attorney indicates that according to Municipal Code which defines the Reserve Capacity Assessment, RCA's should be used for capital projects such as reservoirs and installation and increased size of water mains, and not this type of project. Mr. Grzys also said we also received a recommendation of project costs from Ruekert and Mielke.

Steve Schultz from Ruekert & Mielke said that several studies on the radium issue has been done over the years, the most recent one was the radium study completed in 2003. He said in that study we recommended that if the City needed to go the route of treating the deep well for radium, the most cost effective way of treating that hydrous manganese oxide filters at the affected plants to filter the water to remove the radium, iron and manganese. Mr. Schultz said based upon that recommendation, we did some preliminary design and review work to bring that study up to date in the light of other technologies that have come about since 2003. He said they worked with Staff on the types of structures that would be required at the three well stations, and based upon meetings with staff and their desires and recommendations, we came up with the letter recommending that we install three plants, one at pumpstation #3, #5, and #7. He said the costs are based upon recently bid similar projects that our office

has worked on, adjusted for current market changes, such as construction costs which are affected by natural disasters such as Hurricane Katrina.

Commissioner Morrissey asked how long the working plants around the area have been on line and what the cost of maintenance was. Steve Schultz said that the majority of plants are in Northern Illinois and Minnesota, and they are a little bit ahead of us on compliance and there are some under construction in Wisconsin. He said word from operators is that they are working effectively and removal efficiencies are good, and they remove iron as well as radium. The only operations concern was the mixing of some chemical on site; however, now there is a premixed HMO solution that is delivered to your site.

Commissioner Morrissey asked if we are talking about a year or so of experience in industry.

Mr. Schultz said that is correct, although the technology was developed 20 years ago out of the University of Iowa by Dr. Richard Valentine, it is a proven technology, although most of those plants were done on test scales, not full scales. It is a conventional iron filter vessel that you are adding an additive called a preformed hydrous manganese oxide, which acts as an adsorbent for the radium, allowing the radium to adsorb to the oxide. When you backwash it into the sanitary sewer system, you add an additional chemical and the new water is adsorbed again to that until it reaches a saturation and you backwash again.

Commissioner Morrissey asked about the operating costs. Mr. Schultz said that there is reduced operator cost now that chemicals are not mixed on site, so the costs are chemical costs and lost water costs from backwashing, but in comparison to other technologies such as lime softening or conventional softening is cheaper.

Alderman Gallagher asked about the benefits of the system. Mr. Schultz said that a softener removes hardness, made up of calcium and magnesium but does not remove iron. An iron filter removes iron but does not remove the hardness of the water. The majority of the complaints in the past are about red water are due to iron in the water, and this will largely take care of this in the wells being treated, but it won't remove the hardness.

Alderman Gallagher said that people would still need water softeners, and he was surprised that iron was one of the biggest complaints and was hoping this would solve the hardness problem. Mr. Schultz said to remove the hardness would require softeners, but that would not remove the irons and from a cost standpoint this was the first option as opposed to proprietary options that require a long term contract.

Director Grzys said this system allows us to remove the gross alpha and radium 226 & 228, but also removes the iron as an added benefit. He said that \$100,000 was budgeted for design in 2004, \$693,000 in 2005, and \$3.395 million in 2006. He said that there would be some discharge that will be needed for Basin 6, so the price may increase another \$200,000 for a different type of treatment at Well 3. He said that he talked to Debra Jensen from MMSD and discussed some additional capacity that may be available, and if it is, we will not need the money. Director Grzys said that when we looked at the design of this, we did not look at what basin they were in. Basin #7 has capacity, basin 6 was in a study done by R.A. Smith, which was submitted to MMSD who did a modeling of the project and they indicated we have extra capacity in basins 3 and 6. He said if there is, we can probably use the system that Steve Schultz is designing now and with the holding tank that will discharge into the system at a rate we decide.

Steve Schultz said that MMSD is worried about peak flows and through controls during rain events, if they do not have enough peak capacity in that basin, we would not backwash that basin. Director Grzys said he has asked Steve and Ruekert and Mielke to talk to MMSD about what they need prior to designing the system.

Commissioner Dude asked if the Utility could cut new wells and use RCA money instead to blend the water, and what the cost differential would be.

Steve Schultz said that option was looked at in the 2001 Lake Michigan water study and did a city wide search for well sites, starting back in the mid 1980's, and based on several factors it is cheaper to do the treatment at the existing wells.

Commissioner Dude questioned whether or not we still need City of Milwaukee water on the west side after we spend this money on treating the water. He said getting the City of Milwaukee water makes sense if you don't have enough water, but if you spend all of this money to treat it, why do you need it and raise the cost another buck a thousand gallons?

Steve Schultz there are 3 issues related to the deep sandstone aquifer; radionuclides, declining levels and the increasing total dissolved solids. He said that if the region drops their reliance of the sandstone by 1/3, including Waukesha and other communities, levels will stabilize, who is getting off and when that is going to happen is the question.

Alderman Gallagher said that the decision was made to do this, it is pointless to look at alternate plans, and the discussion here is the transfer of money.

Alderman Harenda asked about equipment costs compared to labor. Mr. Schultz said that it is approximately 60% equipment and 40% labor, and explained the tank storage system at the sites and filtering system, and said he would come back to the Committee with more details when it is bided out.

Alderman Ament said that we obviously have to do something and asked whether we have any issues about the discharge that goes into the sewer. Steve Schultz said that they have done this with other communities and the approvals have gone right through MMSD, and generally by the time the discharge gets into their sewer system and combines with other sewage it is diluted. The only concerns would be if there is a limit to the concentration of the backwash established by the State of Wisconsin, and our design parameters is to keep below that limit. Alderman Harenda asked how often they backwash into the system and what kind of controls are there in a rain event? Mr. Schultz said that is based on how much the wells are used but he estimates 1-2 times a week. He said that rain gauges are attached to the SCADA system and it delays the backwash during rain events.

Commissioner Morrissey asked for clarification for the additional \$200,000 requested for a different type of treatment at pumpstation 3. Director Grzys said that this would be necessary only if we do not receive the capacity for basin 6 from MMSD.

Commissioner Dude asks what the rate increase would be. Director Grzys said that he would not like to speculate, but if he had to guess he thought 6-7%. Commissioner Dude said it would be much higher.

Commissioner Morrissey asked what the increase was for Milwaukee water. Director Grzys said it was in 2 phases and he thought it was 3% and 21%. Director Grzys said these bids could be much less, and he hoped that the City of Milwaukee would come online before that.

Motion by Alderman Ament to recommend to Council to approve the expenditure of \$3,659,700 of Water Utility funds, borrowing \$2,669,700 from Sanitary Sewer Utility and \$990,000 from the balance of Forest View CIP project, to cover the cost of complying with the Radium Consent Order for Pumpstations # 3, 5 and 7. Seconded by Commissioner Morrissey. The motion passed 4-0 with Commissioner Dude voting present.

Closed Session

Alderman Gallagher read the following:

The basis for the item to be discussed in Closed Session is as enumerated in Wisconsin Statute Section 19.85(1) (e) and (g)

Discussion and possible action to enter into closed session pursuant to Wis Stat Sec. 19.85(1)(e) Deliberating or negotiating the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session. More specifically purchase of Lake Michigan water for the City water utility; and

Wis Stat Sec. 19.85(1)(g) Conferring with legal counsel for the governmental body who is rendering oral or written advice concerning strategy to be adopted by the body with respect to litigation in which it is or is

likely to become involved. More specifically the State of Wisconsin radium claim and the radium consent order.

Motion to go to Closed Session at 5:42 p.m. by Alderman Ament. Seconded by Alderman Harenda. Role call vote: Alderman Ament yes, Commissioner Dude yes, Alderman Harenda yes, Commissioner Morrisey yes, Alderman Gallagher yes.

Motion to return to Open Session at 6:15 p.m. by Alderman Ament. Seconded by Commissioner Dude and upon voting the motion passed unanimously.

Return to Open Session

Director Grzys announced that he will be retiring April 7th, and thanked the each Committee member for their support and patience over the years. The Committee members wished him well.

Motion to adjourn at 6:19 p.m. by Alderman Ament. Seconded by Commissioner Morrisey and upon voting the motion passed unanimously.

Respectfully submitted,

Suzette Hanley - Office Coordinator, Utilities & Streets