

**PROCEEDINGS OF THE CENTRAL BROWN COUNTY WATER AUTHORITY**  
**TECHNICAL COMMITTEE**

Pursuant to §19.84 Wis. Stats, a regular meeting of the **Central Brown County Water Authority – Technical Committee** was held on Tuesday, April 14, 2020 at the Town of Ledgeview Public Works Shop, 1915 Scray Hill Road, De Pere, WI, and via video conference. Note that in light of public health concerns regarding COVID-19, this was a telephone/video conference meeting for Committee members. Members of the public were offered the opportunity to either hear the meeting broadcast live at the location noted above or to contact the Water Authority to obtain telephone access to the meeting.

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**Members Present:** Allouez – Sean Gehin (via video conference)  
Bellevue – Shawn Geiger (via telephone)  
De Pere – Scott Thoresen (via telephone), Eric Zygarlicke (via video conference)  
Howard – Geoff Farr (via video conference)  
Lawrence – Kurt Minten (via video conference), Tyler Mueller (via video conference)  
Ledgeview – Andy Tenor

**Also Present:** Gary Dean, Energenecs (via telephone)  
Dan Waala, Energenecs (via telephone)  
Tom Marjanski, Evoqua (via telephone)  
Brett Julian, Evoqua (via telephone)  
Rob Michaelson – Manitowoc Public Utilities (via video conference)  
Brian Branam – Manitowoc Public Utilities (via telephone)  
Chris Klawonn – Manitowoc Public Utilities (via telephone)  
Gary Rosenbeck – McMahan, Inc. (via video conference)  
Nic Sparacio, CBCWA General Manager

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The April 14, 2020 Central Brown County Water Authority – Technical Committee Meeting was called to order at 1:35 p.m. by Chairman Kurt Minten of Lawrence.

**Roll Call:**

1. Attendance was recorded as shown above.

**Approval of Agenda:**

2. Approve Agenda  
**Motion made by Ledgeview, seconded by Bellevue to approve the agenda.**  
**MOTION UNANIMOUSLY APPROVED**

**Approval of Minutes:**

3. There were no questions or comments on the March 10, 2020 minutes.

**Motion made by Allouez, seconded by Ledgeview to approve the March 10, 2020 minutes as presented.**

**MOTION APPROVED UNANIMOUSLY**

**Appearances:**

4. Tom Marjanski of Evoqua and Gary Dean of Energenecs  
Manager Sparacio introduced the guests from Evoqua and Energenecs. They have been invited to present on the Wallace and Tiernan/Depolox 400M chlorine analyzer. Gary Dean noted that there is a local service technician who lives in Pulaski, then turned the presentation over to Tom Marjanski. Marjanski presented the operational details of the Depolox analyzer. These analyzers do not require reagents, but they do recommend maintenance is performed on the electrode every six-months. They must also be calibrated weekly (via DPD method) by confirming the chlorine level in a sample. The bare electrode style of analyzer provides constant monitoring (every second) of free chlorine. There is also a membrane sensor model of the analyzer that has different chemistry options. The units operate with intuitive touch screens and have remote viewing capabilities with a smart phone.

Rob Michaelson asked for more details on the maintenance for these analyzers. Marjanski responded that every six months it is recommended to change the electrolyte and grit. Changing the grit helps to keep the probe clean. Andy Tenor asked whether the mobile application allows you to look at the history. Marjanski responded that it does not – the USB stick on the unit itself must be accessed to get the history. However, the mobile application does continue to show the last alarm until it is acknowledged or addressed.

Chris Klawonn stated that MPU uses the Depolox 3+. They change the electrolyte every 6 months and tend to replace the membranes on an annual basis. The electrodes then seem to last three to four years before they also need to be replaced. Marjanski added that there is also a four-year maintenance process that includes replacement of the reference electrode. Klawonn further noted that MPU uses the bare electrode model where chlorine is added because of the fast response time, and the membrane electrode out in the distribution system. The bare electrode is a durable model, but they are more complicated than the membrane probes.

Gary Rosenbeck asked for clarification on the required flow rate and discharge rate used by the analyzer. Marjanski responded that the input can range from 3 to 50 psi, and the flow rate is regulated at about eight liters per hour.

Eric Zygarlicke asked which model is recommended for post-chlorination. Marjanski responded that the bare electrode model responds faster to changes in chlorination. There were no further questions. The Committee thanked the guests from Evoqua and Energenecs, and they left the meeting at this time.

**Communications:**

5. None

**Agenda Items:**

**6. Response to COVID-19**

Sparacio reported on progress with a communication piece regarding large building water systems. It alerts facility managers to recommendations and resources from the Centers for Disease Control regarding safe practices for reopening buildings that have been operating with low occupancy or have been shut down for an extended period of time. The members are considering various means of directly sharing this information with the appropriate customers. In addition, the message will be posted on the Water Authority website as a resource for all.

Sparacio also asked whether the members would be interested in setting up a forum with the other SPLASH Study utilities to further discuss issues and best practices related to COVID-19. There is interest in this, so Sparacio will work with Green Bay Water to schedule a video conference.

**7. Water System Improvement (Contract A) change order #1 (deduct) from Reeke-Marold, Inc. Gary Rosenbeck reported that the allowance amount for controls programming was adjusted to reflect the actual expense. As such, the contract can be reduced by \$4,983.50.**

**Motion made by Howard, seconded by Ledgeview to recommend to the Board approval of (deduct) Change Order #1 for Water System Improvement (Contract A) in the amount of -\$4,983.50**

**MOTION UNANIMOUSLY APPROVED.**

**8. Water System Improvement (Contract A) final payment request from Reeke-Marold, Inc. Rosenbeck reported that the Howard Booster Station Control Valves project is complete, and the contract amount is now finalized with approval of the deduct Change Order #1.**

**Motion made by De Pere, seconded by Ledgeview to recommend to the Board final payment to Reeke-Marold, Inc. in the amount of \$7,511.20**

**MOTION UNANIMOUSLY APPROVED.**

**9. McMahon Task Order for Lake Michigan Shoreline Erosion Issue.**

Sparacio explained that the Task Order provides for the scope of services to complete the threat assessment related to shoreline erosion on Lake Michigan. He is requesting any feedback and action from the Committee. Rosenbeck added that this Task Order has evolved as they gained understanding of the issues. There will be a subconsultant for geotechnical support and possibly a subconsultant for generating remediation options. The work is already well underway at the direction of the General Manager and Board.

Scott Thoresen asked for clarification on where design fits into the scope of work. Rosenbeck responded that Phase 1 of this Task Order will include assessment of the risk, options to address the risk, and some approximate costs for these alternatives. Phase 2 of this Task Order addresses construction which would include some level of design. Thoresen then asked whether there would be any cost sharing with other parties for implemented solutions. Sparacio responded that this Task Order is focused on assessing the threat

directly to the transmission main, but when it comes to implementing solutions on the shoreline, there have been discussions of cost-sharing with the City of Manitowoc. Those details are in early stages of discussion, but every indication so far is that the City will step up to share in those costs.

**Motion made by Howard, seconded by De Pere to recommend to the Board approval of McMahon Task Order #6 for 48-inch Pipeline Assessment Along Maritime Drive.**

**MOTION UNANIMOUSLY APPROVED.**

**10. Project status updates**

**a. Shoreline erosion in Manitowoc**

Sparacio introduced the draft letter requesting Section 14 emergency flood response funding. He explained that Army Corp staff encouraged the Water Authority to apply, but the major disadvantage is that any solution constructed under this program takes several years to complete. Rosenbeck added that other potential partners have also been contacted relative to the shoreline erosion issues. Wisconsin Department of Transportation staff have responded that they do not have concerns with this stretch of STH 42.

Sparacio continued that the primary partners approaching this issue will be the City of Manitowoc and the Water Authority. The City of Manitowoc will by definition include its Wastewater Treatment Plant as explained in the draft letter. Nsight Teleservices has also been informed of the issue and is a potential contributor to the solutions. There were no revisions on the content of the letter, and there was as consensus that these funds should be pursued.

**Motion made by Ledgeview, seconded by De Pere to recommend to the Board approval of the U.S. Army Corps of Engineers Section 14 of the of the Flood Control Act funding request letter.**

**MOTION UNANIMOUSLY APPROVED.**

**b. Chlorine system solenoids and analyzers**

Minten summarized the conference call held between McMahon, De Pere, Allouez, and Lawrence. These parties worked together to formulate the proposed plan for adding downstream chlorine analyzers and chlorine system solenoids. Rosenbeck asked for discussion on plans for replacing the existing chlorine analyzers, as this was not included in the McMahon proposal. There was a consensus that the chlorine analyzers should be consistent throughout the system, therefore they should all be replaced.

Sparacio stated that we now have the cost estimate details to go back to the question of broad alternatives. He asked for opinions on how the sharing of costs should be structured. The cost estimate for adding the solenoid shut-offs and the downstream analyzer is about \$13,000 per connection station. Farr asked for clarification on whether any plumbing modifications are needed to swap out a Hach CL17 for a Depolox 400M. Rosenbeck responded that he will contact Evoqua with that question. Sparacio stated that he will also contact Hach and Evoqua to obtain life-cycle costs including all required maintenance. The discussion continued, and there was a consensus that a

reasonable cost-sharing arrangement would be for the Water Authority to cover the replacement of the existing chlorine analyzers, and for the communities that wish to add a downstream analyzer and solenoids to cover those costs locally. Sparacio added that the Water Authority does have the capacity to purchase all the materials and then bill the members for their local cost-share.

Andy Tenor asked what the intent is for the timing of these projects and costs for budget purposes. Zygarlicke responded that De Pere can use contingencies to get through the summer, but they would not be able to run their chlorination system without these changes. Minten responded that Lawrence would also benefit from completing this as soon as possible. Sparacio responded that he is sensitive to these timing needs and will work to advance the project as soon as possible. Tenor left the meeting at this time due to another commitment.

**c. Modified system pressure**

Sparacio stated that this item will remain on the agenda as a placeholder in case any future issues come up. He reported that there have been discussions with Howard to ensure that they have adequate fire flows with the modified system pressure. Rosenbeck explained some additional testing that can be performed to continue evaluating the maximum flow for Howard. Michaelson confirmed that MPU can perform this additional test to recreate the conditions that Howard is looking for.

**d. Manitowoc pump station optimization**

Sparacio stated that this continues to be a lower priority with all that MPU is currently working on and maintaining operations during the pandemic. Rosenbeck reported that communications are in motion with Preferred Controls to get the programming updated. Michaelson confirmed that the ball is in his court, and he does want to move this forward soon. He also reported that the MPU engineer that was going to assist with the VFD procurement has taken a different job, so they will need to rely on the assistance of a consultant on that aspect of the project.

**e. CTH R bridge replacement project**

Sparacio reported that pile driving is continuing in April and May. To date, there have been no exceedances of the maximum limits of vibration.

**f. SPLASH Study implementation**

Sparacio reported on recent communications with Hydrocorp. He outlined a proposed approach that Hydrocorp is considering as an alternative to the current contracts. There is nothing new to report on the availability of software to assist with local utilities for compliance tracking.

Sparacio stated that a few members have provided their upcoming projects information in the SPLASH Clearinghouse. He thanked those members and encouraged others to do the same. He then asked if there would be any interest in holding a forum to discuss with other local water utilities how they are handling COVID-19 issues. Several

members responded that they would find this valuable. Sparacio will work with Green Bay Water to set this up.

**g. Satellite leak detection services**

Sparacio reported that MPU has elected to utilize the services of Utilis for the Water Authority's leak detection program this year. We will share the data once it becomes available.

**h. Fiber network mapping project**

Sparacio reported that this work completed by Nsight is related to the communication outage that happened about a year ago. The project confirmed that all the connections are intact, but it was also discovered that the ability was lost to monitor how well the network is handling communication traffic. The major issue is that the device configurations were lost as the original units were replaced over the years. We can fix this issue by replacing these network switches as they fail using an updated model that will restore network monitoring capabilities. An additional benefit of completing this project was that Nsight gained a deeper understanding of the network and can now work faster to troubleshoot any issues in the future.

**i. Bayshore Drive excavation**

Rosenbeck explained that McMahan is continuing to work on a specification for working around the Water Authority transmission main. He continued that this specification will serve mainly as guidance for MPU as they work with municipalities and contractors doing construction around our facilities. Having this guidance will not necessarily prevent such issues from happening again in the future, but it will improve the chances that contractors will take the right steps. This limitation exists because it is difficult to make a specification like this truly enforceable without being able to show that damages have occurred. Michaelson responded that MPU will be willing to use such a specification to help them make the case on these projects as to how another utility should be allowed to safely cross the Water Authority transmission main.

Thoresen stated that he sees a benefit to providing more engineering support to MPU, especially relative to the depth of the transmission main. Sparacio responded that we have implemented the plan review support that was discussed at the last meeting, but any questions about the depth of the water main are still going to be a challenge. Where MPU has gathered data on the actual depth, this will be shared, but in most places, the depth is going to have to be confirmed with potholing.

**11. Water sales report through March 31, 2020**

Sparacio noted that water consumption has recovered from the dip last month. March was about 8% over February, so now we are less than one-half of a percent behind this time last year. He also noted that he went ahead and entered the adjustments between Bellevue and Ledgerview in the true-up section of the spreadsheet.

**Old Business:**

12. None.

**Next Meeting:**

**13. Agenda Items for the Tuesday, May 12, 2020 Meeting**

None identified at this time. Sparacio asked for feedback on how this video conference format worked for everyone. He noted that this Lifesize tool seems to work best when people log on with video, but neither the Board nor the Technical Committee has been able to get everyone on with video yet. This provides better sound quality than connecting over the phone. Zoom and GoToMeetings were stated as other tools that people are using, but Lifesize seems to be working well for most. Please contact Sparacio to work out any issues in advance of meetings. Getting familiar with the microphone muting and camera controls has also been helpful.

**Adjourn:**

**Motion made by De Pere, seconded by Howard to adjourn at 3:55 p.m.**

**MOTION UNANIMOUSLY APPROVED**

Respectfully submitted,  
Nic Sparacio, General Manager