

Whitewater Wastewater Hosts the South and Southeast Regional Meeting

The joint meeting of the South and Southeast Districts of Wisconsin Wastewater Operators' Association (WWOA) was held on August 29, 2018 at 841 Brewhouse in Whitewater, WI, with the Whitewater Wastewater Treatment Plant (WWTP) hosting the meeting. There were 89 members, 8 non-members, and 15 exhibitors in attendance.

Cameron Clapper, Whitewater City Administrator, provided a welcome message to the attendees. He provided interesting facts about Whitewater and said the idea behind the movie Animal House was thanks to John Belushi and his experience at UW-Whitewater. He mentioned that UW-Whitewater is an excellent partner to the community. Cameron expressed his appreciation for the work that WWTP operators do for their respected communities. He closed with a thank you to attendees for coming to Whitewater for the meeting.

Mark Vuksan from Xylem provided a presentation on the IQ SensorNet system that is in use at Whitewater's WWTP. He indicated the advantage of this system is that it can allow for one cable to be run from the various sensors back to the primary logic controller (PLC). This eliminates the need to run power and 4-20 milliamp signals back to each controller, which was typical in the past. Mark showed the configuration of the system that is currently installed at Whitewater's WWTP. He described how the equipment is protected from lightning strikes and high voltage spikes, and provided examples of facilities where lightning struck and the sensors were not damaged. The system is offered with optical dissolved oxygen, turbidity, total suspended solids (TSS), pH, oxidation reduction potential (ORP), ammonia (NH₄), nitrate (NO₃), UV spectral absorption (which can provide SAC, COD, BOD, DOC, TOC, Nitrate, Nitrite, NOx, UVT, and TSS measurements), and sludge level measurement sensors.

The next speaker was Bob Boyle from RGH and Associates. He provided a presentation about high-visibility products provided by OccuNomix. He presented several of the products offered by OccuNomix and passed them around the room.

Jim Orr from Dixon Engineering discussed coatings and concrete repair in the wastewater industry. He provided a background on how concrete can deteriorate and how pH of the concrete can impact repairs. He discussed several tests that should be completed on concrete prior to repair coatings being applied. Jim discussed methods for rehabilitation of concrete structures and showed examples of rehabilitation projects he has been involved with. Jim closed by stressing the importance of occasionally reviewing the condition of structures that are not always easily accessible.

Amy Garbe from the Wisconsin Department of Natural Resources (WDNR) provided a brief WDNR update. She indicated the collection system operator study guide is now posted to the WDNR website. The applications for the exam sign up will be posted soon and WDNR will have an October 10 deadline for submittal. A public hearing on the Wisconsin River total maximum daily load (TMDL) was recently held. Public comments will be accepted until September 19. Amy reminded communities to review their permit application dates and submit required testing, if needed. She also reminded communities to contact WDNR if they have had flooding-related issues.

Next an Exhibitor raffle was held and the Exhibitors were given a minute to tell us more about their services.

Business Meetings:

The South Region held their business meeting. Josh Voigt called the meeting to order. The minutes from the Monroe meeting were approved. The treasurers report was approved. Elections of officers for 2019 were held. Marc Zimmerman was re-elected as Treasurer, Cody Shoepke as Chair, Randy Langer as Vice Chair, and McKayla Keisling was elected as Secretary. The membership was reminded that the South Region has a \$250 scholarship available that members in good standing can use for continuing education.

The Southeast Region held their business meeting. Nate Tillis, City of Waukesha, Chair, called the meeting to order. The minutes from the Racine meeting were approved. The treasurers report was approved. Elections of officers for 2019 were held. Mike Penkwitz was elected as Chair. Kathy Bates was elected as Vice-Chair and Wayne Castle was elected as Secretary. Paul Gagas is the Treasurer. Jeff Bratz, WWOA President, provided an update about the Annual Conference held October 16-19 at Lake Geneva. A reminder about the Regional meeting will be at the Annual Conference. Three teams have registered for the Operator's Competition. The next Southeast Region meeting is February 12, 2019 in Allenton.

Following lunch, Josh Gable from Centrisys presented on sludge dewatering and thickening. Josh started with a brief overview of sludge dewatering technologies. He then described the various components of a centrifuge and how they work. The two major moving components of the system are the bowl and the scroll. Variable frequency drives can be used to optimize the centrifuge to optimize energy efficiency and minimize wear on the unit. The scroll speed can be adjusted for the cleanliness of the centrate or the solids content of the cake. Influent flow can also be adjusted to alter performance. Josh showed data that demonstrated centrifuges are becoming much more energy efficient compared to older models. Josh then talked about thickening centrifuges, which are often used for thickening solids prior to anaerobic digestion or thickening sludge prior to land application.

Nathan Cassity from Donohue presented an overview of the recent Whitewater WWTP project. He provided an overview of the key elements of the projects and drivers behind the project which included age of facilities, rotating biological contactors (RBC) shaft failures, code issues, and future regulatory requirements. The largest component of the project was a new activated sludge secondary treatment system which replaced the RBCs. The project also included replacement of electrical switchgear, improvements to preliminary treatment and the digester complex, and upgrades to the administration and laboratory building.

The meeting was adjourned and the day ended with a plant tour of the Whitewater Wastewater Treatment Plant. A big thank you to Whitewater for hosting the day, to Donohue and Associates for sponsoring the morning pastries and refreshments and to the Exhibitors for providing prizes for the raffle.

Submitted by Randy Langer, Southern District Secretary and Mary Ellen Mortensen, Southeast District Secretary.