

Southern District Meeting 2/18/2010

Meeting was opened by Roy Swanke.

Watertown mayor Ron Krueger welcomed everyone to Watertown. The mayor recognized the difficult job of waste water operators due to the changing targets.

Jon Butt from Symbiont was the next speaker. Jon's topic was Activated Sludge Computer Simulations. With the increasing cost of adding infrastructure, it has become important to get more out of less. Using computer simulations along with knowledge of the specific treatment plant can help engineers and operators to look at the effect of changes to the system. The computer simulation can show dynamic effects of changing various parameters. This data along with system experience can help make better decisions relative to future plans and requirements.

The next speaker was Gordy Koch from Alpha Terra Science who was speaking on the GHS system – Global Harmonized System. This system is new to a lot of people and addresses the right to know laws for protecting people/employees from hazardous materials. OSHA requires a HazCom program which requires: 1. A Written Program, 2. MSDS, 3. Labels/Warnings, 4. Training. Gordy went through some examples of requirements for this type of program and how it should be done properly and some potential problems with current HazCom programs. GHS is currently not a regulation or a standard. There is a proposal for changes to OSHA regulations that would use GHS. GHS conforms to UN rules, is supported by EPA and DOT. MSDS will become SDS and will be filed under specific section so there is an order for the data. Labels will have pictograms in addition to words. GHS is a classification system which will work with global trading and shipping of materials. If adopted, transition to this system will require new training and funds to comply with new requirements. Gordy recommended that people start preparing now for the potential of this new system.

Business Meeting: Minutes for Baraboo meeting approved. Treasure Report approved. No old business. New Business: Roy talked about sending brochures for meetings. He proposed a postcard once a year with the meeting dates and then using email as the notification. Motion was made and approved to use the note cards as proposed by Roy. Roy mentioned next meeting in May in conjunction with Central States. There was discussion on registration and how all the details had not been worked out. Boscobel offered to hold the August meeting. Blue River has offered for next year. Roy asked others to suggest meeting locations for next year. Roy went over Operator of the Year and the need for nominations. Other announcements were on the Government Affairs Seminar in March, Spring Sludge Symposium in March. He also talked about the WWOA website and how we now have the ability to post items to the website. Kevin Freiberg spoke about the other awards given out at the WWOA conference and also spoke about the Operator Challenge and how we needed people to sign up for it. Roy recognized Paul Lange and the city of Watertown for hosting the meeting. He also recognized the Watertown CC for their hospitality. Motion to adjourn. Raffle was held.

Next to speak was Paul Kent from Anderson & Kent, S.C. His office serves as chief council and lobbyist of Municipal Environmental Group, WW division across the state. Their primary focus right now is on phosphorous and nutrient issue. The new regulations are probably the largest financial impact on the wastewater community since the Clean Water Act.

Right now most plants are regulated based on NR217 which sets limits at 1.0 mg/l. This is based what good practices could achieve. Now these limits will be regulated by the Water Quality Standard requirements. This will be based upon what is needed in the receiving stream not the effluent. Proposed stream limits for Wisconsin will be 0.1 mg/l for large streams and 0.075 mg/l for small streams. Any receiving stream above the 0.1 mg/l the effluent limit will be set at the standard of 0.1 mg/l. Right now Kent is not aware of any plant that is achieving below 0.3 mg/l. To get to these limits will likely require some sort of filtration.

He estimates that between 140 and 180 plants will be required to meet these limits and will require a filtration system. It is estimated the cost of this is between \$1.3 and \$1.8 billion statewide to implement this. Costs per pound can range from \$200/pound to \$600/pound.

Paul indicated there is nothing that can be done to stop this. The only thing that can be done is to help manage the implementation. The EPA has mandated it and will step in and take control from the state if it is not implemented. Paul discussed that point sources contribute only 20% and the cost for removal of agricultural phosphorous is as low as \$2 - \$40/pound. So part of what his firm is doing is trying to interject this into the discussion and help manage implementation of the rule. One thought was to set interim limits, such as 0.5 mg/l, and let some of the non-point sources take effect. This may change the limit requirements for the point source. They also are trying to make the new rule provide incentives for the agricultural sources to make changes. Right now this rule is set for final adoption in June or August at the latest. Another issue looming is the nitrogen limits based upon Water Quality Standards. As of now no limits have been set but it is coming. He talked about Total Max. Daily Limits (TMDL's) for phosphorus as it related to the Lower Fox and the Rock Rivers. Draft on this has not been done.

Finally he spoke about NR151 which is the state non-point rule for phosphorous covering agricultural and urban areas. For the first time establishes phosphorus index for agricultural sites, but does not require compliance unless cost share dollars are made available to the agricultural sites. He also spoke about trading where a point source could make funds available to the agricultural source which may help reduce help the limit requirements on the point source.

Doris Thiele spoke next on updates the DNR. She went over reduced office hour, and furlough days and stressed to call ahead. She also went over new contacts. They are Ken Denow at Horicon, Rich Edward at Fitchburg, Bob Liska at Fitchburg and Steve Warner

for land spreading. There will be a new basin engineer in the Dodgeville office. She also indicated the need for electronic filing and thus the need for a computer

Doris addressed the permit backlog. Although the goal is 10% is running much higher. She indicated that plants should continue to operate under the old permits until the new permit is received. She also reminded to everyone to update WAMSID. Chloride variances, SSO code, phosphorous limits were also covered.

Steve Warner spoke next about land spreading and permits. Permits must be submitted electronically. He stressed the reason for the review was to protect both the environment and the permit holder. He gave some websites that might be helpful ([dnr.state.wi.us](http://dnr.state.wi.us) – Surface Water Data Viewer and [websoil.nrcs.usda.gov/app/homepage.htm](http://websoil.nrcs.usda.gov/app/homepage.htm) – NRCS Web Soil Survey). You can use these sites to see if these sites are potentially usable. The only way to get a site approved is to hire a certified soil scientist. NR204 will rule in site approval. Most permits are being reviewed within a day of being received.

Jack Saltes spoke next about CMOM and E-Reporting. Training is going to be available with Wisconsin Rural Water end of April or early May. A new disinfection exam and study guide is out. A new activated sludge exam is in the works. The general exam will be worked on next and any one who would like to help can be part of the work group starting this summer. A state apprenticeship program has been approved and via NR114 a system will be put in place to provide a mechanism to get certification via experience. This is about a year away. Jack also distributed to the attendees the newly published CMOM Guidance Booklet.

Bill Ericson spoke next about Watertown WWTP and specifically about Simplified Approach of process control. The activated sludge process is challenged by the influent variability. Process control can be defined as adjusting variables to achieve the goals or meeting plant discharge limits. Variables available to operators are waste activated sludge flow and RAS flow and oxygen supply. Maintaining a constant sludge age will create a homeostasis within the process. Sometimes the operator will create variability by wasting solids and maintaining a specific MLSS. An activated sludge plant will self regulate if the sludge age is constant. So if mixed liquor is wasted instead of RAS then the control becomes strictly hydraulic.