

WATER COMMITTEE
OCTOBER 12, 2016
MINUTES

MEMBERS PRESENT: Pete Frisina, Chairman
James K “Chip” Conner, Vice Chairman
Commission Chair Charles Oddo
Lee Pope, Water System Director
Jimmy Preau

ABSENT: Steve Rapson, County Administrator

NON-VOTING MEMBERS: Dennis Davenport, County Attorney
Michael Diaz, CH2M

STAFF PRESENT: Russell Ray
Chief Harold Myers
Anita Godbee

The meeting was called to order by Chairman Pete Frisina at 8:00 A.M.

I. APPROVAL OF MINUTES FROM THE MEETING ON SEPTEMBER 14, 2016.

Lee Pope made the motion and Jimmy Preau seconded, to approve the minutes from the meeting on September 14, 2016. The motion passed unanimously.

II. UPDATE ON WATER TREATMENT PLANTS.

Russell Ray reported pay request number 13 has been processed. The contract amendment in the amount of \$113,304.63 was approved by the Board for the Zero 2 Waste Optimization of the filter backwash system. This increased the contract to \$4.6 million. The last pay request was \$354,891.00 that was primarily with the delivery of the Powder Activated Carbon system. He said with a million dollars left to go, we will probably see a few more big pay requests like this as the contractor wraps up several pieces of equipment. The critical path items are basically done, the filters are in use, all seven filters are filtering. The Powder Activated Carbon system and the Chlorine Dioxide system are still to be finished up.

Mr. Pope reported that we got an amendment to our permit to run the filters 5 through 8 at 5 gallons a minute per square foot; that was to get us through the high demands of the summer because we only have four filters. That expired October 1, we had to go to 3 gallons a minute per square foot per filter. That was why they had to get these other filters on line so we would be able to meet demand; however we are now officially going to the state to see if they will assist with pilot testing all eight filters for 5 gallons a minute per square foot. He said he does not see that being a problem, but that is a process; before it was an emergency amendment to our

treatment so we could meet the demands of the summer while we were under construction. Now we will actually do an official pilot study to check all aspects of the filters to make sure they can endure the high flows per square foot. He said he does not think there is going to be a problem, but it will probably extend on into next summer before they will officially give us that extension. Then CH will have to form a report. Then they will amend our permit to treat. We have run up to 200 plus hours per filter. Generally before the expansion we were running the filters up to 96 hours, then we generally washed at 96 hours because of loss of head, which is the difference between pressure on top and below the filter, or else, filter breakthrough. The filters could not perform beyond that, it was at 96 hours and sometimes less. Now we are seeing over 200 plus hours per filter. That spreads out your backwash process which is going to also be more savings on top of the savings from Zero 2 Waste process.

Commission Chairman Oddo asked about the process taking so long, what are they looking at. Mr. Pope explained it is seasonal for one thing. We never know what is going to hit; you could have algae growth to bind your filters. They are going to want us to probably go through all four seasons. And, they are going to want to verify the loading during different times of the year. Rain events and things like that don't affect them as far as loss of head. They will rate the filters on a gallon per minute per square foot, but they will also look at loss of head which is the clogging of the filters. Obviously, if you have so much water on top, you should be taking so much water out of the bottom, if the filter clogs, that changes. They look at that differential pressure and decide when it is a good time to say when a good time is to take this filter out of service. There are several things that affect it.

Mr. Pope went on to say we will need an official engineering report, and then they will review it. It will probably take up to a year, or more, depends how long the state wants to run the test. Michael Diaz commented that one of the big advantages of the work that happened during the summer is that it gave the plant and the state a chance to see the filters at a high rate and to see how they are performing. There are not going to be any potential issues. He said we are going to be able to use that as a first stepping stone as the basis to be able to start building a case for long term.

Vice Chairman Conner asked what the run time on the old filters was. Mr. Pope commented sometimes it got down to 30 hours. Mr. Ray said normally we could get more than that, but especially when we ran powder activated carbon on top of the filters, it would bind up a lot quicker. Mr. Pope said we generally washed at 96 hours. Mr. Diaz said the new filters are easily surpassing the hundred hours. About a week ago, they actually got to 240. Mr. Ray said we were not filtering at 5 gallons per square foot at that time. They will still drop down the number of hours, but you are still getting that much volume through it. You are just getting it through quicker when you run more water through the filter. Once they get that many hours on them, it is difficult to backwash them. Mr. Pope said the media is putting out a high quality of water, so we are seeing some very low turbidity coming out through the filters.

Mr. Diaz commented that the big thrust of the project is now behind us. Now we are coming down to getting the two chemical systems completed.

Mr. Ray showed photos of the filter air bubble testing, with the underdrain manufacturer representative on site. They want to see how the bubbles are distributed throughout the filter. He then showed photos of the level of Lake McIntosh, but today it is down further than what he had in the picture. We have not seen a time, in recent time, where it was dry downstream of the spillway. The photo showed the labyrinth system where the water is in the lake and then overflows and goes out and down the creek. The lake is down about a foot. He then showed a photo of the pump station.

Mr. Ray then showed a screen shot of the filters in the plant, you can see all of the filters are in operation; the numbers in the photo were due to the process of the filters still coming on line. Turbidity has been well within range. We will be able to track how much water goes into a backwash, how much water goes through the filter between a backwash cycle. We will be able to monitor that information.

The next pictures Mr. Ray showed were of the powder activated carbon system that is being installed. The piping will come out through the injection vaults. Carbon will be brought in by super sacks, and will feed down into the feeder. He described the process of the carbon dropping down into the system and feeding into the pipes. Super Sacks are between 800 and 1,000 pounds; a hoist system is part of the feeder to get the sack up into position. Mr. Diaz commented the carbon system in the plant we have now is pretty labor intensive and uses 50 pound bags. They have to be physically emptied into the machine. Mr. Pope pointed out with the new installation operators will not be exposed to the carbon. Mr. Diaz also said, this is a better injection point from a chemical standpoint versus the old system.

Mr. Ray pointed out the compressor that is used to control keeping the powder loose and moving through the hopper; and to control the valves that are air actuated. Mr. Pope stated it gives us the ability to inject the carbon into the water coming into the water coming into the pond or from the pond up to the basins, which extends the contact time of the carbon with the water for a lot longer than we what have at the previous location. What we do now is inject it almost at the filters, which binds our filters, but also we have very little contact time to absorb anything from the water.

Mr. Ray then showed the new chlorine dioxide system, the operators will not have any exposure to chemicals. He also showed a photo of the old equipment that will be demoed. The room will then be cleaned up and painted. Mr. Ray also showed a video of the air scour in the filters.

The sand and anthracite has been added to the filters, sodium hypochlorite was added to the water in the filters with the media already installed. It set over the weekend for disinfection, microbiological tests were taken and when they came back negative the filters were put into service.

Mr. Diaz commented they have to go back and gather all the turbidity data for the past week or so, and all the disinfection data and submit it to EPD to be able to be able to prove that it is working satisfactorily.

Mr. Pope explained that cameras are being installed at each plant. He said where we are going long term is minimizing operators contact with chemicals for safety purposes; automating their whole job as well as giving them the ability to visually see what is happening throughout the facility. We can hopefully reduce labor cost long term. All of this points to being a more efficient system. Not only will we be putting out a high quality product, but we will be a lot more efficient and a lot safer. That is what the long term goal is.

III. PUBLIC COMMENT.

Anita Godbee reported from the Recreation Commission meeting on the park hours. She said she appreciates being allowed to come to talk about park hours. She said it has been a pleasure to work, and she is sure it will continue, to work with the Water System over the years. She said you all are awesome people to work with; they have never had any troubles. She said she appreciates all the help and guidance they have been given throughout the years. She said they look forward to continuing our relationship. She said she thinks we have a good partnership. She said thank you for what has been done in the past and she looks forward to working with the Water System in the future.

Mrs. Godbee went on to say at the meeting of the Recreation Commission last night the Recreation Commissioners discussed the park hours as it relates to just the parks, not the Water System parks; because that is under the Water System jurisdiction, not under Parks and Recreation. They looked at the hours and decided that the Recreation Commission is going to leave the park hours from sunrise to sunset. One of the things they looked at; it is October and with Water System Park hours being closing at 8:30 at night, it is dark in their parks at 8:30 at night. They were concerned about safety of our patrons walking around our walking trails at 8:30 at night. Sunset now is around 7:07. In their parks, if they went to what the Water System hours are at 8:30 at night; that is an hour and a half time that people would be in their parks in the dark. The Recreation Commissioners number one concern whenever they look at anything is what is the safety of our constituents. They understand enforcement and they appreciate enforcement, but their concern is the safety; they do not want any of our participants in the parks on the walking trails in the dark. Even in the morning hours the Water System open up at 6:30 in the morning; if you look at sunrise, it was around 7:07 this morning. If they opened up at 6:30 there could be the potential of people being in the park that early in the morning, before the sun rises.

Mrs. Godbee stated the Recreation Commission voted last night to leave it as is. She said we have had sunrise to sunset since she has been with the county, close to 30

years. They have not had any issues; she said she believes the Water System has had the 6:30 to 8:30 this time of year time frame and she does not think there have been any issues in the Water System parks. She said the Recreation Commission is advocating that we leave everything alone as it is.

Mrs. Godbee mentioned at one time someone had asked about water safety classes; paddle safety. The Recreation Commission discussed that as well last night; and decided as part of their offerings, they would be offering some paddle safety classes. They will not be certification classes; all they are is paddling classes where participants receive a participant's certificate, not an actual certification.

RESERVOIR LEVELS

The Committee reviewed the levels of the lakes on the USGS site. Mr. Ray commented this has been a dry year. The worst drought situation we had Lake Horton was down close to 16 feet. We had a wet winter after that and it recovered. We typically recover very well.

Mr. Pope commented that he is involved in Drought Calls on a regular basis. The news media finally started using the term last night what he has been asking them to use, rainfall deficit. In certain areas right now we are not really in a drought, we are in a rainfall deficit. Our reservoirs are certainly not at the point where we need to be panicking and screaming drought. The state is going to do that because they are mandated by the drought protocol. He stated we are just in a rainfall deficit; we are not really in drought conditions at this time; especially in this county. He said he thinks Peachtree City is showing to be in about 12 inches of rainfall deficit that is not very much. He said where he thinks we need to be concerned, and this is what he has asked the state to look at, we need to be concerned next March. If our reservoirs, meaning the entire state, have not recovered at that time, and we are going into our high demand part of the year, and we have low reservoir levels. That is when we need to be concerned and start talking about water conservation. We are going into our time of the year where we generally recharge all of our reservoirs. He said he thinks we are going to be fine by next March. We need to monitor them through the winter months, but he thinks this county will not have any problems recovering. He said Russell has been here longer than him, and they have discussed it pretty regular; they feel comfortable that we are in good shape when high demand hits next March.

Mr. Pope stated he is trying to talk to the state about being very cautious about screaming drought. He said he referenced the Homeland Security color bars they use for security levels. We have burned people out so much on them because we have stayed at a high level that nobody even pays any attention to it anymore. This could be the same thing with drought. We start talking to our citizens and every year around September we start hollering drought, they are not going to pay us any attention because they are going to our reservoirs and see the reservoir looks fine. They then ask, what are they talking about? Then when we get into a real serious drought, they are not going to listen to us. It is like the little boy that cried wolf. He

said he thinks we need to educate on rainfall deficit and just being water conservative year round, instead of screaming drought every year about September.

Mr. Ray mentioned as far as water conservation we continue to work with the Metropolitan North Georgia Planning Commission with the toilet rebate program. We are putting out education pamphlets right now with the water bills. That is a requirement of the state law. When they go to Level 1, we are required to educate and let people know.

Mr. Pope said we are already at that point now. They have already said that and we are doing our education. Now we will start recovering. Demands have dropped, our daily demands and performance has gone down and we will start to see a little more rainfall. We will recover. He said we are going to do a lot more education on lawn watering. He is working with the Flint River Basin, they have some great information. They have a guy who did a full study on lawn sprinklers and that will help educate folks. We have some education coming to try to talk to folks about being more cautious about over watering their lawns.

IV. ADJOURNMENT.

Vice Chairman Conner made a motion to adjourn the Water Committee October 12, 2016 meeting. Jimmy Preau seconded. The motion passed unanimously.

There being no further business, Chairman Pete Frisina adjourned the meeting at 8:30A.M.

Peter A. Frisina

The foregoing minutes were approved at the regular Water Committee meeting on the 9th day of November, 2016.

Lisa Speegle