

City Commission Workshop
February 6, 2018
5:30 pm

This workshop is to discuss the city's wastewater treatment plant issues. Members present included Mayor Mortimer, Commissioner Chastain, Commissioner Nugent and Commissioner Waters. Also present were City Attorney John Cooper, Sewer Department Supervisor Kyle Jerrels and City Manager Bob Milner. Commissioner Woods was absent due to illness.

Mayor Mortimer called the workshop to order at 5:31 pm and turned the workshop over to Mr. Milner. Mr. Milner introduced Greg Lang and Tim Norman from Mittauer and Associates. Tim Norman produced a handout titled "Near-Term Repair Items at the Wastewater Treatment Facility". He addressed the most critical repairs needing to be made at the wastewater treatment plant. The first repair involves the Alligator Creek outfall ditch that was damaged during Hurricane Irma. Mr. Norman said the city could request money from FEMA for the repair. The second repair involves the aeration basin diffusers. They are filled with sand and grit. Mr. Norman said the existing grit removal facilities at the plant have not been functional for some time. The grit is causing the diffusers to break off. Mr. Norman said the sand and grit need to be removed and the diffusers need to be repaired in the near-term. Commissioner Chastain asked if near-term meant in the next 6 months. Mr. Norman said the city needs to immediately start making plans to address these repairs. Commissioner Waters asked if the grit is the same problem we had 5 years ago. Mr. Jerrels said that it is. Mr. Norman said the sand and grit is constantly coming into the plant from cracks in the underground sewer pipes. The third repair involves cleaning the RAS/WAS pipe. The return sludge piping is completely blocked at the wastewater treatment plant. Mr. Jerrels has had to run a temporary pipe across the ground to return sludge to the clarifiers. The fourth repair involves the clarifier mechanisms. Mr. Norman suggested that when each clarifier is taken down to clean the RAS/WAS piping the clarifier mechanisms be inspected and repaired. This will be a labor-intensive process. Mr. Norman asked Mr. Jerrels how long it has been since they were taken down. Mr. Jerrels said they try to take them down every 6 months. Commissioner Nugent asked if Mr. Norman had met with Gary Sneddon to discuss the wastewater treatment plant. Mr. Norman said he has not talked with Mr. Sneddon. Commissioner Nugent said they were supposed to meet to discuss the issues at the wastewater treatment facility. Mr. Norman said that he met with Mr. Jerrels but Mr. Sneddon was not there. The fifth repair involves re-wiring the return sludge pump on the south clarifier to meet code. The sixth repair involves the on-site lift station controls. The pumps are constantly tripping out and need to be repaired. The seventh repair involves the disc filter controls. The HMI controls on both filters are not functioning and need to be replaced. Mr. Norman asked if the commissioners had any questions on the needed repair items. Commissioner Chastain asked if 1 contractor would be able to repair all the items. Mr. Norman said that when the tank is taken down for the sand and grit to be cleaned out repairs will need to be made quickly so the tank can be brought back up. Mr. Norman said there will need to be a

lot of coordination. He did not recommend preparing plans and specs because the scope of the project is unknown until the tank can be drained and inspected.

Mr. Norman addressed the items that can be delayed. The first item involves the chlorine contact chamber rehabilitation. The new plant will have new disinfection facilities that will eliminate the need for the existing contact chambers. Greg Lang explained that when the new disinfection facilities are needed the city should receive a large percentage of grant funding lowering the overall cost to the city. Mayor Mortimer asked if the commission had agreed to build new facilities. Mr. Lang said they have not asked the commission to make a decision because they are not at that point. He said that they would have a report for the March meeting with recommendations and costs. The second item involves digester piping modifications that need to be made. There are valves that aren't working but it would cost a significant amount to repair or replace the valves. A new decant system for the digester will be part of the new or modified wastewater treatment plant. Mr. Norman believes we can get by with what we have until we have a new or modified wastewater treatment plant. The third item involves rehabilitation of the drying beds. Mr. Norman said much of the new or modified plant will be built on the drying beds so they will no longer be used. The fourth item involves the flow equalization functionality. The existing flow equalization facilities have not been used for some time. Mr. Jerrels said they have been mixing the equalization with the RAS and it has to be run through twice. The fifth item involves completing the automation projects. The new or modified plant would have a new telemetry system that would allow the plant operators to monitor the plant processes from their phones. The last item involves the grit system replacement which would cost a significant amount. The new plant will have a modern grit removal system. In the effluent beltway where the raw sewage comes in and spills over into the pumps we could add a simple concrete baffle to stop the grit from getting into the pumps.

Mr. Norman addressed the high solid levels in the plant in an effort to minimize sludge production. We have approximately twice the solids of other plants. The sludge needs to be removed from the system or it is going to spill out. Mr. Norman said Mr. Jerrels has done a good job minimizing the amount of sludge that needs to be hauled away but the sludge is at a level where it needs to be removed. Commissioner Waters asked what it would cost to address the 7 repairs that need to be made right away. Mr. Norman said it would be between \$200,000 and \$400,000 to make the repairs. Commissioner Nugent asked what other repairs have been made to the wastewater treatment plant. Mr. Lang said there have been quite a few repairs to the collection side of the plant. Mr. Norman said once the report with the recommendations and costs was prepared the commissioners can make a decision on how to proceed. Mr. Lang said it is not unusual for a plant the age of ours to need significant repairs. He said we have gotten a great amount of value out of the plant but now we need to spend a lot of money to keep it working. Mr. Norman said we are probably looking at having to haul 300,000 gallons of sludge out of the plant. He said the digester needs to be empty before we can drain the tanks. Commissioner Nugent asked Mr. Jerrels if he and Mr. Sneddon had come up with anything besides the 7 items that needs to be addressed in the near-term. Mr. Jerrels said these 7 items are the ones they identified. Mayor Mortimer asked how this addressed the consent order. Mr. Norman said these items do not address the consent order. These are the things that need to

be taken care of to keep the plant operating. Mayor Mortimer asked what Mr. Norman's recommendation was to address the consent order. Mr. Norman said the consent order is part of the study to be submitted next month. Mayor Mortimer asked how long we have been under this consent order. Commissioner Waters said it has been a couple of years. Mr. Norman said we are not behind on the consent order. Mr. Lang said that wastewater plants with consent orders will receive a higher percentage of grants from the Department of Environmental Protection and water management groups. Commissioner Chastain asked if the commission had already voted to have the Alligator Creek outfall ditch repaired. Mr. Milner said the commission authorized him to get bids. He is working with Krebs Land Development who believes they can complete the project at a reduced cost. Commissioner Chastain asked what the plan is to repair the other 6 items. Mr. Jerrels said they need direction from the commission to begin repairing the other items. They need to get bids and bring them before the commissioners. Mr. Jerrels said his priority is keeping the city in compliance with the regulatory agencies. Commissioner Chastain asked if Mr. Jerrels could present to the commission the priority items at the next commission meeting. Mr. Norman said they could present them at the first meeting in March. Commissioner Waters asked how long ago the tank was cleaned out. He believes it has been more than 5 years ago. Mr. Jerrels said the tank was last cleaned when they took the mechanical aeration out and put the fine air bubbler diffusers in the aeration basins through a grant in 2010. Commissioner Waters asked if removing the grit and sand would help to prepare for the repairs and help the plant work better. Mr. Norman said it would give the plant more treatment volume. Mr. Jerrels said it took 2 weeks to clean the tank in 2010. Commissioner Waters asked if cleaning the tank was the first thing they needed to do. Mr. Jerrels said cleaning the RAS/WAS piping would need to be done first because the pipe running on the ground could potentially cause a spill. Commissioner Nugent asked if there were exposed controls as well. Mr. Jerrels said they plan to work with the city's electric department to fix the exposed controls but they will have to work around all the underground piping. Mr. Milner asked Mr. Norman if there would need to be a lot of sludge hauling in the absence of the drying beds. Mr. Norman said there would. Mr. Milner asked Mr. Jerrels how many gallons of sludge they hauled last year. Mr. Jerrels said they hauled 100,000 gallons of sludge to our spray field at a cost of \$13,500. Mr. Jerrels said with the bypass construction and the weather there is no way to get trucks in to haul the sludge. Mr. Norman said they are getting a bid from Synagro as an alternative to sludge hauling. Synagro uses a portable dewatering device with a centrifuge to reduce sludge by ten times. They might be a long-term solution depending on cost. Attorney Cooper asked if the smoke testing was complete. Mr. Milner said it was about 90 percent complete. Attorney Cooper said no matter how we proceed the piping needs to be repaired. He asked if Mr. Norman had a ballpark dollar amount for repairing the piping. Mr. Norman said the pipe repair project would need to be done in phases to maximize grant funding. We should receive around 70 percent of the repair cost from grants. Attorney Cooper asked if the commission would have to decide if we would continue to dump in Alligator Creek or use spray fields. Mr. Norman said that information would be available in the report for the March meeting. Mr. Norman said that while grant money would be available to repair the old plant or build a new one it would not be available for operating and maintaining the plant so that cost would be a consideration. Attorney Cooper asked if Mr. Norman could give the commissioners a ballpark figure on what a new plant would cost. Mr. Norman said we would need a 1.25

million gallon a day plant. He said a new plant would cost around \$10 per gallon so the new plant would cost around \$12,500,000. Mayor Mortimer asked Mr. Lang and Mr. Norman why the city is in such a difficult position. Mr. Norman said we should be farther along than we are. Mayor Mortimer asked why we aren't farther along. Mr. Norman said the consent order is the driving force behind the project and we are still on track with the consent order. Mr. Lang said a couple of years ago they received some grant money and were able to rebuild 4 lift stations. He said grant funding comes in cycles so they use the grant money for the most urgent need. Attorney Cooper asked who provides these grants. Mr. Norman said a number of sources. He said the Department of Environmental Protection is one of the biggest funders. He said we also received a Community Development Block Grant from the Department of Economic Opportunity. The Suwannee River Water Management District is supportive of the city through grants. Mr. Norman said the primary source right now is Rural Development. Mayor Mortimer asked why we have these emergency repair needs. She said she is not happy that we have an engineering firm that we have contracted with that has allowed us to have these 7 emergency items that need to be addressed. Mr. Lang said that characterization is unfair because the plant has been operating with significant operational problems for decades. Mayor Mortimer said she understands that these problems existed before Mittauer came on board but they are on board now. Commissioner Chastain asked if money had been budgeted to cover these items. Mr. Milner said not nearly enough to cover all of the items. Commissioner Chastain said Mr. Milner was aware during budgeting time that these items would need to be fixed so why did the budget not include money to take care of these items. Mr. Milner said he does not have an answer at this time. Mayor Mortimer asked Mr. Milner and Mr. Jerrels if they had an idea of how much these items would cost so they could budget for them. Mayor Mortimer asked Mr. Jerrels what role he plays in the budget process. Mr. Jerrels said he plays no role in the budget process. He said every year since he took over he has sent the city manager a list detailing the deficiencies in water, wastewater, collections and the spray field and this is the first time they have been addressed. Mr. Milner asked if the estimated cost would include the purchase of additional acres for a spray field. Mr. Norman said it did not because he does not think purchasing additional acreage for the spray field is going to be a viable option because there are not enough acres available. Attorney Cooper asked what other option we had. Mr. Norman said one option they are looking into is deep well injection. This involves digging a deep well and injecting the waste under the Florida aquifer. Commissioner Chastain asked if Clay County was using this method. Mr. Norman said Clay County is looking into it. He said the well costs millions of dollars and sometimes they don't work. Mr. Norman has had discussions with Jeff Martin with the Department of Environmental Protection. Mr. Martin issues permits. Mr. Norman said there are other small towns with the same problem. Mr. Martin understands that we may not be able to get out of Alligator Creek. Mr. Milner thanked the commissioners for holding the workshop.

There being no further business, the meeting was adjourned at 6:23 pm.