

The Special Joint meeting of the Municipal Authority of the Borough of Sinking Spring and Borough Council was opened on Wednesday, September 5, 2007, at 7:30 p.m., at the Sinking Spring Borough Hall, by Council President Lawrence Schmidt. The following Authority and Council members were present:

Municipal Authority:

Francis Butkus  
Shawn Schwartz  
Paul Roth  
Richard Biggs  
Dennis Leiby

Borough Council:

Lawrence Schmidt  
James Zerr  
Bruce Light  
George Butkus  
Barbara Kutz  
Stew Wenrich

Others present were: Mr. Alex Morrison, ARRO Consulting, Municipal Authority Engineer; Mr. John Hoffert., Authority Solicitor, Mr. Charles Fitzpatrick; Borough Solicitor, Mr. Robert Ludgate Sr.; Borough Engineer, Mr. Clarence Noecker; Mayor, Mrs. Regina Shade; Borough Secretary/Treasurer and Ms. Elizabeth White, Municipal Authority Secretary/Treasurer, who recorded the minutes of the proceedings.

Mr. Schmidt opened the meeting stating that we are open to all kinds of suggestions and turned the meeting over to Mr. Francis Butkus for opening statements.

Mr. Francis Butkus stated that this is a meeting that he believes is long overdue. He stated that we needed to have a meeting of the minds of both the Authority and Council as to what we need to be doing to keep the Sewer Treatment Plant running in good order and to keep the lines in good order and to meet the needs of the people. Mr. Francis Butkus turned the meeting over to Mr. Alex Morrison of ARRO Consulting.

Mr. Morrison started by giving a little bit of history. He mentioned that as Council is probably aware, the Authority had looked at expanding the Sewer Treatment Plant and considered capacity needs of neighboring municipalities. He stated that as it boiled down there was not a large interest when it came to signing up for participation in the plant expansion. He stated that with that in mind we stepped back and asked ourselves 'what do we want to do to the treatment plant at 1 mgd capacity that we feel needs to be done to upgrade it. He mentioned that there were three main items that we wanted to do, which he believes some have been on the capital improvements list of the Borough.

Mr. Morrison stated that a big item has always been screenings of the head works. He mentioned that right now we have grinders at the head works of the sewage treatment plant. He stated that they grind up the influent materials and the smaller particles, theoretically, to pass through the pumps and the treatment plant without causing any other problems. However, Miller Environmental, and even before they were there when the borough had its own staff, they experienced sever clogging problems in different areas of the plant. He stated that the return and waste activated sludge pumps clogged and they had to clean them every day. He stated that they have changed pumps and did what they could do and the problem has never completely gone away. He mentioned that Mr. Butkus has built some screens to help preclude this clogging but it still clogs. So, one of the items that was under consideration and is under consideration is screening the influent to get this material out before it gets into the plant.

Mr. Morrison stated that another item is final clarification. He mentioned that not too long ago, when Mr. Hillibush was still here, we had a meeting and he was explaining that he is running two final clarifiers with one oxidation ditch. He mentioned that each oxidation ditch is about a half mgd worth of flow and that it should be one oxidation ditch with one clarifier. He mentioned that Mr. Hillibush's confidence level was much higher having two clarifiers on line and that is what he has always done. Mr. Hillibush's suggestion, which the Authority concurred with, was to add another clarifier. He stated that as you approach one mgd, if you take one off line for a significant amount of time, you run the risk of violation. He stated that because of that the consideration of adding a third clarifier was put on the table. Mr. Morrison mentioned that it is an expensive item but the Authority saw the logic in it.

Mr. Morrison stated that the third item has to do with the solids handling side of the plant. He stated that we have a reed bed system that is being used to de-water the solids. He mentioned that the process has never worked up to the full expectations of the design. He mentioned that an outside third party did a study of the reed bed systems and the entire plant and the only weak link they found was at the reed beds. So, consideration of expanding the reed beds or putting in another solids de-watering device like a centrifuge or a belt filter press was considered. He stated that the cheapest alternative is expanding the reed beds. He mentioned that if we would have expanded the plant from 1 mgd to 1.5 or 2 mgd we most likely would have gone with a mechanical devise. But, if we are going to stay at or near 1 mgd then the reed bed option is the most plausible and least expensive option.

Mr. Morrison stated that ARRO had done a feasibility study and looked at various items, but basically boiled it down to these three big items. He stated that in the mean time, the 2006 chapter 94 report projected a hydraulic overload with in the next five years and also indicated an organic overload present day. He mentioned that the organic overload could have been sampling issues but they are not sure. He stated that a few times we have gotten up to our organic limit which is 2002 pounds per day. He stated that because of those items there was a consideration of possibility taking a small step forward in capacity of .25 mgd. In addition to that, the Borough took a step last year to remove a significant amount of I & I by taking on a project near Socialist Park. He stated that they did remove a significant amount of I & I and dropped the flow.

Mr. Morrison mentioned that Borough Council approached the Authority and asked them to do a study of the entire system, which the Authority did and ARRO has noted some areas where I & I is still getting into the pipes. He stated that we need to move forward with fixing those areas as one means of recapturing some of the flow that we are giving up because the water is leaking into the pipes.

Mr. Morrison mentioned that ARRO has been authorized by the Authority to start the design for those three main items that we discussed. However, as they moved forward with the planning documents and the consideration of a .25 mgd expansion there was some concern expressed by the Borough that maybe this is not the way they want to go. Mr. Morrison stated that there is no reason to move forward with the .25mgd expansion or these upgrade items if the Borough is not in agreement with this. He stated that ARRO saw that the Authority and the Borough were at odds or at least that there was a lack of communication. He stated that is why we are here tonight, to try to figure out what do we want to do and what should we do.

Mr. Morrison opened the meeting up to questions.

Mr. Schmidt stated that most of the items that Mr. Morrison spoke of were on the to do list. He stated that he is not sure that we have all together the finances to do it all. This becomes a financial responsibility. Mr. Schmidt asked Mr. Morrison what he thinks is the cost is to do all of this. Mr. Morrison stated that he believes the study showed four and a half million. Mr. Biggs stated that he is correct. Mr. Fitzpatrick asked how that would be paid. Mr. Morrison stated that it would really be up to the Authority on how that would be paid for, but stated that he would suspect that they would do a borrowing or get a bond issue or get financial advice on the best means of getting money. Mr. Fitzpatrick asked if when ARRO did the feasibility study if they did any rate impact studies. Mr. Morrison stated that they did not do a rate impact study at that time. He stated that what should happen is that since this is an upgrade that benefits everybody, if they borrow the money and you increase the rates it increases the rates for everybody and everybody shares in the cost so the Borough would not bear that cost alone.

Mr. George Butkus mentioned that Mr. Schlott, the Borough's Sewer Engineer from ARRO, was trying to consider that as an option in the rate study that is being done for the Borough, just because we have not done one in awhile. He mentioned that Mr. Schlott could not be here tonight but that he believes that he was working on a few different options with the rate study so that we could see the different rates depending on what we decided to do back at the plant. Mr. Schmidt asked if the Borough, at this point, would bear any responsibility for the finances of this. Mr. Morrison stated that you would have to seek financial advice on that but stated that he would suspect that they would ask the Borough to cosign or pledge the rates to secure the loan.

Mr. George Butkus asked Mr. Morrison what if we do nothing, eventually, either these things would have to be done or the state would make us do them or do something. Mr. Morrison stated that right now the WWTP is in a projected hydraulic overload which creates some complications. He stated that as modules come in now, he is not sure that we can sign them because it asks if this additional flow will create a projected hydraulic overload and if you check yes then it is going to set you down another path with PaDEP. He stated that there are corrective action plans, you can talk to DEP and maybe get some in. It does not mean that the door is slammed shut and that there is no additional capacity. It just says that you are in a projected hydraulic overload. He stated that we are in an organic overload and that we can probably review that with DEP, and that they are aware that we are in this condition and that they have been very lenient so far, but, they are going to want an answer as to what we are going to do.

Mr. Francis Butkus stated that we have to look at part of the problem and that Mr. Morrison had alluded to it. He stated that part of the problem is that capacity in the plant is being chewed up by I & I. He mentioned that another thing that has come to light is that some of our customers are using a lot more water than was originally intended for them. He stated that one in particular purchased two EDU's many years ago, but now they are using about 25,000 gpd which equates to quite a few EDU's that were not paid for and that was not taken into account. He stated that when we take the rough numbers from a year ago there was about 70,000 gpd of I & I that was fixed. He mentioned that we know there is a leak on Broad Street of about 50,000 gpd. He stated that those two I & I leaks are about 10% of the capacity of the plant and that is not taking into account any of the numerous small leaks. Mr. Biggs stated that takes into account the hydraulic overload to a degree, short term. Mr. Morrison stated that might be one of the plausible responses back to DEP, saying we are going to attack this on the I & I side and see how far we can go with that. He stated that the organic overload is a little more problematic and probably a little more suspicious too. He stated that he sees some of the numbers that jump from 1000 pounds per day of BOD one month to 2000 the next month and he wonders how that happens because it is not typical in a sewage plant. Mr. Morrison mentioned that maybe some careful consideration of sampling methods might bring that in line. He stated that Mr. Hillibush was aware of it when he was in charge and he regularly changed the head end of the sampler.

Mr. Biggs asked if there was anything financially that could be done in regards to the customer that Mr. Francis Butkus spoke of earlier that only purchased 2 EDU's and uses 25,000 gpd. Mr. Fitzpatrick stated that there is, because the Authority adopted a resolution when Mr. Binder was solicitor, which provided for tapping fees, and if it is the one that he thinks was adopted, provided that in the event a commercial or industrial user increases his use you can then charge him for additional EDU's. He mentioned that you would establish a base year and if the user increases it beyond that base year you can charge additional EDU's. Mr. Biggs mentioned that he believes that we should look at that right away. Mr. Morrison mentioned that we have done that in the past when someone puts a beauty salon in their house or when someone turns their house into a two unit apartment when we were aware of it. He stated that he believes some of these things just kind of grew over time.

Mr. Francis Butkus mentioned that fifteen years ago when the plant was redesigned and expanded, we had a lot less restaurants feeding into us as to what we have today, and that is another thing that leads to a higher BOD.

Mr. Fitzpatrick stated that what they are talking about certainly is important and you want to focus on collecting as much by way of EDU's as possible, but it does not really address flow because you can't tell people to cut back on what they are doing. He mentioned that we still have this issue and that is really what we are facing right now. Mr. George Butkus stated that isn't it like some people are using capacity that they didn't pay for. Mr. Fitzpatrick stated absolutely and that the Authority should pursue that but what he is saying is that it doesn't help you in your current projected overload.

Mr. Biggs stated that we are talking about 4.5 million to increase our gallons .25 mgd. Mr. Morrison stated that there is an option where we would not get any additional capacity and we would stay a 1 mgd average daily flow plant. He stated that we would request of the state a maximum monthly flow factor which would administratively get you out of this five year projected hydraulic overload. He also mentioned that we would probably request an organic re-rating because the organic number, even through we only went over it one month at 2002 pounds there were a lot of months were we were right up there at 1900, and it is just a matter of time before we break it. He stated that the process that is down there, the oxidation ditches, with out any changes at all, are strong enough to except a higher organic capacity. He stated that it is just a paper deal and that the maximum monthly flow is just a paper deal, so if you go that route then the decision really is what do we want to take off of the five year capital improvements plan. He mentioned that the screening have been on the capital improvements plan for eight years. He mentioned that they are cheaper if you do more at one time then it is to do it one at a time. Mr. Biggs asked how developed is our Borough and what if the development at the Golf Course goes in and what if we do our loop and put a shopping village in. He stated that we have a lot of old homes and there are going to be a lot more converted into apartments, and what if Pat Garret and Joe Dell do their development. Mr. Biggs stated that he does not believe that .25 is the answer.

Mr. Fitzpatrick stated that the other question is how much more organic capacity do we get with a .25 mgd hydraulic expansion. Mr. Morrison stated that it would be about 500 pounds per day more, so we would be at about 2500 pounds per day. Mr. Francis Butkus mentioned that one of the things that has an affect on this whole thing is the pre screenings to get the plastics, hair, and string out. He mentioned that they saw that in hard fact when they went out to Illinois. He stated that they were able to get a 25% increase in the rating of their plant biologically by removing the dirt from the flow because it was taking up capacity in treatment parts. Mr. Morrison stated that it was a rather sophisticated screening device which was part of the Cannibal Process. Mr. Biggs asked how much the Cannibal System costs. Mr. Francis Butkus stated that it is not so much the cost but that the whole system may not be feasible in our situation here because of the phosphorous level. Mr. Morrison stated that we do not have a phosphorous limit right now but there is the expectation that the Delaware River Basin Commission is pushing toward a phosphorous limit. He stated that when we looked at the Cannibal System it does not

handle phosphorous very well so we would have to handle it chemically and that is a big problem and you end up with sludge everywhere. He stated that the screening system worked very well and that it is a patient process that they probably won't break out. He stated that what Mr. Butkus is saying is that screening inert materials out can only help because it takes up space that should be used for digestion and treatment purposes. He mentioned that some of that has BOD associated with it so you get that out of your system and dispose of it as solid waste and take it to a landfill.

Mr. Fitzpatrick asked what Mr. Morrison, as the Authority Engineer, would estimate the amount of I & I currently in the system to be. Mr. Morrison stated that he believes it is about 150,000 gpd. He stated that if you do an I & I project he would not expect to remove more than half of it because as you fix one leak the ground water raises and it will just find another place to enter the pipe. Mr. Fitzpatrick asked if ARRO had factored in taking out half of that in determining the projected hydraulic overload. Mr. Morrison stated no, because the projected hydraulic overload is based on the 2006 Chapter 94 Report. He mentioned that it is one way that you can approach handling this, is go after this on the I & I side. He mentioned that we won't get big benefits and that we might get 50,000 to 75,000 gpd out. Mr. Francis Butkus mentioned that you also have to consider that I & I is an ongoing thing and as a whole in the last four years there was very little maintenance done on the lines and we are paying for it now. He stated that it must be an ongoing thing all the time.

Mr. Biggs stated that his whole point is that .25 mgd is a band aide and if we are all going to sit here and talk we need to talk about what we really need. He stated that we are not going to have less requirement. He stated that we have talked about expansions before and the cost and a lot of it was based on neighboring communities and a willingness to participate. He stated that once we determine what the need is then we can figure out how we are going to finance it. Mr. Francis Butkus stated that eventually we are going to have to do it and it is just a question of how.

Mr. Light stated that his question to the Authority is that if the Authority knew that the repairs were needed in the past then why didn't they go ahead and make the repairs instead of waiting till the whole thing falls down and then say that the Borough should pick it up. Mr. Fitzpatrick stated that he doesn't know that it is anybody's fault and stated that all systems of this age have their I & I problems. Mr. Francis Butkus stated that it was not the Authority's problem and that the Lease Back Agreement states that the Borough operates and maintains the lines and the system. Mr. Fitzpatrick stated that the maintenance of the lines are clearly the Borough's responsibility under the agreement. He stated that there are provisions in the lease agreement that could argue both ways, one of them is that if repairs are to be made and are not made the Authority can request the Borough to make it or the Borough can request the Authority to make it. He stated that he doesn't know that we should be pointing fingers. He stated that the most beneficial thing for the Borough is to move in the right direction and get the proper capacity. He stated that his thought is that before an expansion decision is made you should know what the rate impact is going to be. He mentioned that we will get more cooperation from the other

municipalities that feed in and are going to have to pay for it if they know what they are looking for and you are going to be able to give the residents a heads up as to what to expect. Mr. George Butkus mentioned that even if we don't increase the capacity of the plant most of these upgrades are very prudent if not necessary to do. He also mentioned that the longer you wait the more it will cost.

Mr. Hoffert stated that part of the debt is going to be a self liquidating debt in that you are going to pass it on to the ultimate consumer. He suggested that if we all recognize that something has to be done and that there is a minimum that has to be done and if we should go for the maximum. He stated that the only way to decide is to authorize ARRO to work up some numbers and rate schedules that we can all look at and evaluate. Mr. Schmidt asked if we should have a third party look at it and give us an evaluation. Mr. Hoffert stated that you can do that but you may be duplicating a lot of effort that has already been done. He stated that we might want to, at least preliminarily, have ARRO give us a rough idea and then have someone else check it.

Mr. Wenrich stated that he is somewhat confused, somewhat angry and somewhat relieved. He stated that he knows that we have to look forward but that we also have to look at how we got in this mess in the first place. He stated that, yes, we do have to have upgrades done just to survive. He asked if anyone on the Authority can tell him how many EDU's we have available. Mr. Francis Butkus stated that right off the top of his head he could not. Mr. Wenrich stated that if we are hydraulically overloaded how can the Authority even say that we have capacity. Mr. Wenrich stated that he agrees with Mr. Biggs and that the developers should have to pay for this. He stated that if we put the plant in jeopardy, then shame on whoever sold off those EDU's with out knowing that you are going to put the plant at capacity. Mr. Francis Butkus stated that you have to look at what was committed too. Mr. Wenrich stated that since he has been on Council they have been trying to take steps to control the I & I and if we could get even a 50% handle on it that would be great. He stated that his question is who gave the ok to overload this plant. Mr. George Butkus stated that he doesn't know that anyone did. He stated that the only reason he says this is because of things like Alcon who purchased say two EDU's which is about 400 gpd and they are using 25,000 gpd. Mr. Wenrich stated that is somebody's responsibility who is in charge of that to clamp down on it and address it. Mr. Francis Butkus stated that is a good suggestion and stated that he agrees with it 100% but asked where does the accounting part of that fall. Mr. Wenrich stated that he did not know and that he has heard different things. He wanted to know how we can even think about doing this Main Street Project when we don't even have our own house clean. Mr. Francis Butkus stated that he agrees 100% on that one.

Mr. Francis Butkus stated that as far as the Authority goes, we do not know what the flows are in the plant. He stated that he would not know if he did not attend the Council meetings and hear Mr. Hillibush give them. He stated that the Authority does not do any billing and has no method of income. He stated that the moneys that were accrued in our accounts came from tapping fees alone. He mentioned that the purpose of the tapping fee is to either pay for major upgrades or pay down the debt.

Mr. Fitzpatrick stated that he has added up all of the contracts and agreements that the Authority and the Borough entered into with other municipalities and the one that they entered into with Forino and he looked at the numbers that Mr. Hillibush was reporting at all of the Council meeting. He stated that to date he has not seen that any body has conveyed off more capacity than we have. He stated that the number is probably up to about 850,000 or 900,000 when you add the total commitment, which is not being used by everybody, to what is being used and then back off what Lower and South are putting in you don't have excess of the capacity at the plant. He stated that he doesn't know this projected number and that he did not really study the Chapter 94 Report but actual numbers based on what is reported monthly on average monthly flow you have not sold off more than the capacity. Mr. Wenrich stated that you can make any kind of numbers fit what ever you want but the truth of the matter is that the plant is hydraulically overloaded and we have a problem. Mr. Fitzpatrick stated that the plant is not overloaded. Mr. Morrison also stated that the plant is not overloaded at this time. He explained that the Chapter 94 Report is a planning tool that the state has and that it is an early warning notice and that we ***are not hydraulically overloaded today***. He said that Chapter 94 Report is saying that we are projected to be hydraulically overloaded within the next five years and because of that you need to start thinking about what you are going to do now. He stated that until you plan something, design it, get the financing, get it built and get it started up it can be three to five years and sometimes even longer so that is why we are here tonight. Mr. Biggs asked how you project out five years. Mr. Morrison stated that they do what is called a population projection and explained how they come up with the numbers.

Mr. Biggs asked how good these projected numbers are. Mr. George Butkus asked Mr. Morrison if just because there is projected to be more development does not mean that we are automatically committed to serve that development. He also asked if he is correct in his understanding that what the Chapter 94 Report is showing is that if the current development trends continue you will have so many more facilities that need to flow to your plant, however, that does not mean that those places have already reserved capacity in the plant. Mr. Morrison stated that he is correct and that any development would have to fill out a planning module and that is going to ask whether it is going to create a hydraulic overload or whether it is going to create a projected hydraulic overload in the next five years. He stated again that these are all planning tools and early warning measurers that DEP has to say that you are not in trouble right here today. Mr. Schmidt asked that if we sold a certain number of EDU's to a municipality then we are committed to serve those EDU's. Mr. Morrison stated yes that we are. Discussion ensued.

Mr. Morrison stated that he wanted to make a correction. He stated that we do not sell EDU's and that we sell flow. He stated that we sell a certain number of gallons per day to neighboring municipalities. Discussion ensued concerning EDU's verses flow.

Mr. Fitzpatrick stated that we have sold X amount of capacity to a neighboring municipality and that is a finite number and that can't project into an over load as a result because we have not sold any more than that. He stated that the amount of flow that we sold to South, Lower and Spring is about 550,000 gpd so that means that all of the increase in use has got to come from the Borough in your projections. He stated that you can't project that we are going to sell more capacity to another municipality. Mr. Morrison stated that they are not projecting that we are selling more capacity they are projecting that more people are going to move in there and use capacity that is already reserved for. Mr. Fitzpatrick stated that is a finite number and we can't be responsible and we can't be obligated to treat more than what is contractual right now. He asked why the development in Lower Heidelberg meant anything to us. Mr. Morrison stated that it still runs up your base flow. Mr. George Butkus asked Mr. Morrison if that isn't the flaw in the way the state set up how we have to calculate the stuff for the Chapter 94 Report. He stated that it is growth in the areas that you serve.

Mr. Francis Butkus mentioned that about thirteen years ago Spring had a line that came into us at manhole 208. He stated that line, when we signed up to relieve Spring, at that time was for 125,000 gpd, and from the date we opened the gate we never saw 125,000 gpd, it was always 180,000, 200,000 and sometimes the needle even went up to 1,000,000. He stated that is the kind of surging we get. He stated that part of this flow that is calculated on hydraulic flow is calculated on your total monthly volume of water that goes through the plant. He stated that if you pull the flow charts from the plant, when there are heavy rains you will see it spike and it may stay there for several hours. Mr. Butkus stated that it is not sewage but I & I. He stated that those kinds of things are what is spiking our hydraulic overload. He stated that we must address our I & I. He mentioned that if you go back and look at the average daily flows on Mr. Hillibush's monthly reports you'll see that they are about 525,000 gpd to 625,000 gpd. Mr. Fitzpatrick stated that he was correct. He stated that they hydraulic overload is flooding that is coming in. He mentioned that we did find one big problem back in Brookfield Manor where a line was open and the mud just rushed in and we got flooded out. He said that we know the biggest part of the problem is coming from within the Borough, and we know that from the flow meters that are in the Township meter boxes. He stated that it behooves us to tighten our own house up. He mentioned that the biologic is a different story.

**ADJOURNMENT:**

Mr. Butkus asked if there was anything else for the good of the order.

Mr. Leiby made a motion to adjourn; seconded by Mr. Schwartz. Motion carried.

Respectfully Submitted,

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Elizabeth White  
Municipal Authority Secretary/Treasurer

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Regina Shade  
Borough Secretary/Treasurer