

County Business

VIRGINIA:

At a regular meeting of the King George County Service Authority Board of Directors, held on Monday, the 18th day of February, 2020 at 5:30 p.m. in the Board Room of the Revercomb Building at 10459 Courthouse Drive, King George, Virginia:

PRESENT: Cathy Binder, Chairman
Michael Bennett, Member
Annie Cupka, Vice-Chairman
James Morris, Member
Allen R. Parker, Jr., Member
Jeff Stonehill, Member
Neiman C. Young, County Administrator
Eric A. Gregory, County Attorney

Ms. Binder: I call to order this regular meeting of the King George County Service Authority Board of Directors. Our invocation will be by Mr. Parker, and our Pledge of Allegiance by Mr. Weakley. Please stand.

Mr. Parker: Dear Lord, bless this meeting and bless all those in here, help us make good judgments for all the citizens of King George County. We ask these things in Jesus's name.

Ms. Binder: Amen.

Mr. Weakley: Please remain standing and face the flag.

Members: I pledge allegiance to the flag of the United States of America and to the Republic for which it stands, one nation under God, indivisible, with liberty and justice for all.

Ms. Binder: Do we have any amendments to the agenda?

Mr. Weakley: No amendments, Madam Chair.

Ms. Binder: Thank you. Now, it's time for public comment. Comments will be limited to three minutes per person in order to afford everyone an opportunity to speak. If comments relate to a specific public hearing item, we ask that you offer those comments at the time of the public hearing. Would

anybody like to speak? Do we have anybody online? Any correspondence? All right. Let's just open up the meeting. Do I have reports from members of the Board? I almost jumped ahead. Mr. Morris.

Mr. Morris: No report, ma'am.

Ms. Binder: Mr. Parker.

Mr. Parker: No report, ma'am.

Ms. Binder: Ms. Cupka.

Ms. Cupka: I was only going to say that I attended our first budget work session last Thursday, February 13th. I wanted to thank Mr. Weakley and his staff and our auditors and financial planners for all their work in putting that together and looking forward to continuing the process. Thank you.

Ms. Binder: Thank you. Mr. Bennett.

Mr. Bennett: On February 11th, I attended along with Mr. Weakley the Planning Commission public hearing requests concerning the villages of King George crossroads rezoning request. Mr. Hertenstein, the developer whose request was approved five to three. However, there were a number of comments made by some of the members of the Planning Commission that I was not able to respond to at the time, but that they deserve a response, so I'd like to respond now.

Before I begin, I'd like to say that it is obvious that the members of the Planning Commission really care about King George County. They take their service very seriously and they try very hard to do the right thing. Having said that, I take issue with a few of their comments. Number one, there is no downside to the Service Authority from the villages development. It will provide us with significant connection fees and new customers.

If fully built, I believe we would realize over \$5 million in connection fees from the 250 townhomes and villas plus additional connection fees for the apartments and commercial businesses. However, there will be a downside to the Service Authority if this rezoning is not approved. It doesn't mean it has to be approved, for those of you on the Board of Supervisors. It's just we need to recognize there will be a downside to the Service Authority.

Without these new connection fees, we do not have a way to fund either a new plant at Purkins Corner, or decommissioning that plant and rewriting the wastewater to Hopyard Farms other than by adding to our debt, which is something we're trying to avoid. One member of the commission said basically the following. He said, "The villages may be good for the Service Authority, but that only helps 30% of King George County." This statement is incorrect.

The Service Authority provides service to virtually all residents of King George County, not just those who are our customers. Every student and every teacher in our schools utilizes our facilities even if they are not customers at their home. Virtually every business and their customers use our services. With all due respect, it's just wrong to suggest that only Service Authority customers use Service Authority services.

Another member of the commission has repeatedly voiced concerns that the villages' subdivision could utilize all the available capacity of the Purkins Corner plant and therefore some capacity should be kept in reserve in case someone else needs to use it, and our agreement with the villages recognizes that fact. However, I believe that view is directly contradictory to the best interest of the Service Authority. We are constantly told that we should operate the Service Authority as a business. If that's true, then in my opinion, we should use every single bit of our availability as fast as we possibly can.

Our goal should be to utilize every single ERC at Purkins Corner at the earliest possible time, first come, first serve. Why would any business want to have unused capacity just sitting there especially a business like ours where we need more customers and more connection fees? Finally, the commission is legitimately concerned about the impact that development will have on King George County.

However, in my view, they seem to be assuming that the impact will occur immediately rather than over the ten-year time period that it will take to construct the entire development. For example, there are concerns that the schools will have to absorb 134 new students as if that will happen immediately. Given the phasing of construction units, depending on what is built first, it could take ten years for all 134 students to materialize.

13 per year is a significantly lower impact than 134 at once. That rezoning request will next move onto the Board of Supervisors for a

final determination. On February 13th, I attended our budget work session with my colleagues. On February 14th, I took part in a conference call regarding the water contamination issue at Fairview Beach. On the call were representatives from the Hampton Roads Sanitary District, I'll refer to them as HRSD.

I'm going to use a whole bunch of in that of acronyms, so you'll know I really did use to work for the federal government, but HRSD is the Hampton Roads Sanitary District; VDH, it's the Virginia Department of Health; DEQ, Department of Environmental Quality; Tri-City County Soil & Water Conservation District; the Service Authority and the Fairview Beach Residents Association. We're all in this call.

Here's the background for those of you not familiar with the issue. For many years, the Potomac River at Fairview Beaches had high E coli/bacteria levels at times. VDH does weekly testing and post swimming advisories when the levels are too high for safe swimming. Around 2007, 2008 Virginia Tech found approximately 27% of the bacteria was caused by human waste.

The Fairview Beach Resident Association confirmed this finding, the Environmental Canine Service, which is a business located in Maine that has dogs sniff just like they do for bombs or cadavers or whatever. They can also find human waste. Last year, HRSD was engaged to do testing and DNA analysis in an effort to locate the source of the problem. The 2007-08 testing was based on science that is now considered inaccurate and unreliable.

Tri-City County is paying for the testing via a contract between HRSD and King George County. HRSD can only contract with the governmental entity. They're the equivalent, I guess, of the Service Authority for Hampton Roads. Service Authority, sewage lines, and Fairview Beach were one possible source for the contamination.

HRSD performed four tests in 2019; two dry-weather tests in the summer and two wet weather tests in the fall. The tests were all negative for any significant levels of human DNA. The conference call was to determine where we should go from here. As a resident of Fairview Beach, I have personal interest in this issue. It has been my experience over the years that the high levels of bacteria normally correspond to rain or high winds.

In the summer, it normally manifests itself as a thunderstorm coming through, followed by a front, which then turns up the water. I'm not

clear if it's based on the rain or the wind that whips up the surf, and apparently neither are the scientists. At my suggestion, it was agreed to do some additional testing this coming summer because there were no wet weather tests last summer when the population of Fairview Beach is at its highest levels. As a result, a lot more sewage would be present both in our lines and in the septic tanks at the adjacent trailer park.

Tri-City County will get a proposal from HRSD for this round of testing. VDH will continue its role in testing on a weekly basis. The preliminary conclusion at this point in time is that human waste does not appear to be the cause of the problem. All four tests have not shown that a human waste. That's good news, not only for the residents of Fairview Beach and my grandchildren that swim in the river. It also means that if this preliminary conclusion is confirmed, Service Authority lines are not leaking and causing the problem. It's also good news for the Service Authority. We will be doing a couple more tests this summer trying to get to the bottom of this.

If it's birds or dogs, it's not good to be swimming in their bacteria either, but it's less bad than swimming in human waste. It's hard for me to believe that we have more dogs or birds at Fairview Beach than anywhere else since I happened to live there. The human waste is more dangerous because it contains the human pathogens. That's why we've been trying really hard to nail this down.

If it's not human waste, I don't know what we're going to do next, but at least at this point there's no evidence of that in the Service Authority lines have not been leaking. HRSD showed us a PowerPoint where they're doing all these; they showed us some case studies of other testing they're doing around the Hampton Roads area of Virginia. Their expertise is finding leaking sewage lines and then backtracking to where those leaks are caused. The good news is we don't seem to have that problem so far. Thank you, Madam Chair. Thanks for the time.

Ms. Binder:

Thank you, Mr. Bennett. That was very informative. I just participated also in the first Service Authority work session. It was always a good to get our financial update and a good picture and informative work session, especially for our new Board members. That is my only part of my report. Thank you. Have a motion on the consent agenda.

Mr. Bennett:

Move to approve the consent agenda.

Ms. Cupka:

Second.

Ms. Binder: Any discussion? All those in favor?

Members: Aye.

Ms. Binder: Any nay? Chair votes aye. Motion carries. Report from the County attorney?

Mr. Gregory: No report at this time, Madam Chair. Thank You.

Ms. Binder: Thank you. Presentations and reports?

Mr. Weakley: No presentations or reports.

Ms. Binder: Any action items or discussion items?

Mr. Weakley: No, ma'am.

Ms. Binder: All right. General manager's report.

Mr. Weakley: Thank you, Madam Chair. I do a few updates. Last time I spoke to you about a meeting I had scheduled with DEQ to talk about the Dahlgren groundwater withdrawal permit. We talked about some other items while we were down there. This was driven by a development that is planned in the Dahlgren area known as Hope Retreat. I've spoken with their design engineer since that meeting and their numbers are substantially lower than what was anticipated so that could be favorable. We would be able to serve that project with existing capacity.

However, part of that discussion and reviewed some information on well abandonments or what I would like to call potential well abandonments. DEQ came to this Board, or provided a presentation back in 2016 and outlined some of the wells that may need to be abandoned and also the need for geophysical logging for several wells that spilled out in our existing groundwater withdrawal permits.

Most of those have a timeline of 2026. However, you can't wait until 2026 to provide information such as geophysical logging because it has to be part of the permit review process. I won't bore you with this. You can go back and read. It's just some definition. According to USGS borehole geophysics, but basically with the log in that they do, there's an observatory well; they go down and they look at different formations.

They look at what's present there as you can see clay and so forth. They want to look. Do you just go through one aquifer? Do you bridge several aquifers, similar to two wells that we have over at Hopyard Farms that

goes through two aquifers? That's just to give you a visual. They send a probe down there and they can capture all that various data and then they wanted to see any well pump depth level where we have our well pumps set.

As they go through they look at your withdrawals, not only what you are permitted by from VDH, but primarily what compared to your groundwater withdrawal permit limits and your monthly and annual withdrawal limits permits that you apply for now. They are moving those up to a 15 year. I believe current permits are good for 10 years.

This is a lot of data, a lot of information we have to put forth. I just want to let you know we are working on a plan with Draper Aden. We're going to address the wells that are spelled out for abandonment, any of the wells that are spelled out to be raised, which can affect yield rates. I don't have that information tonight. I'm not trying to bring forth panic; I'm just putting it out on your horizon because it was just originally put out on mine.

We will address that and I will come back to the Board with a plan whether that's our scheduled times and when we're going to do the geophysical logging. If there are additional wells we feel will have to be drilled, but look for that in the upcoming months as I work with Draper Aden on a plan. Mr. Bennett.

Mr. Bennett:

Madam Chair, if I may. Mr. Weakley, I know you're not a well-driller by your experience, but why would you go through one aquifer to get to one below it? Can you answer that?

Mr. Weakley:

I don't have an answer for that, sir. I'll see Mr. Parker may--

Mr. Parker:

The answer is for withdrawal rates and quality of water depending on the soil types, rock formations; you're going to be able to extract a certain amount of water from any given aquifer. You may have to punch through one or two to get the amount of water that you're looking to withdraw. Certain aquifers are only going to have a pump. If you're in a clay stratum, for example, it's not going to have the same recharge rate or the same withdrawal rate as a sand stratum or a fractured rock stratum would.

Depending on how much water you're looking to get, you're going to have to go into a stratum that's going to allow you to extract that amount of water and then usually you'll seal off the wells into that particular aquifer. That would be my question is how you're going to

necessarily find the pumps because I'm not with the geophysical because usually they seal off the pump within the aquifer, so you can't get past a certain point.

Mr. Bennett:

Let me ask you, Mr. Parker, it'll take Mr. Weakley off the hot seat. As you're drilling the well, you find the first aquifer. At that point you can test to see how much water is there in terms of how much you're going to be able to draw out of that well, as well as the quality of the water. Is that the way it works?

Mr. Parker:

Yes. You'll do a pump test. Usually they run for a 24-hour draw down is what you're doing. You're measuring how much water you can pull out of it in a 24-hour period and how much it lowers the aquifer when you do that. It's a basically a giant stress test and then you can test the water quality as well. If any of those don't line up for what you need and you keep moving to the next best system.

Mr. Bennett:

The reason I'm asking this, it's my understanding based on what I thought DEQ had said. Maybe you remember this too Ms. Bender. I thought they didn't like us going through one aquifer to another one below. Based on what, Mr. Parker has said, that may be the most logical way to get the most water. Is that fair to say they don't like it going through an aquifer to another one?

Mr. Weakley:

Both points are accurate. Let me answer your question about how would you access to get that information. You basically have to drill another observatory well beside that to do this is according to Ms. Tisdale from DEQ central office. To answer your question, Mr. Bennett, that the confusing part with me is you have two state agencies. VDH gives you the certificate to operate for you as well.

They look at your drawdown information. They tell you what your safe yield rates are for your well production. Then you had the groundwater withdrawal program that is ran by the other state agency, DEQ. They don't like the mixed aquifer. I think if you get back to Mr. Parker's comments if you can somehow shore up so you're not blending between the two aquifers, they may permit that.

Again, for discussion purposes and I'm just letting you know those requirements are there. We will put forth a plan. Obviously, I don't know what the geophysical will cost at this time. I'm talking to AC Schulty, they're one of the providers that do well work just to get an idea to see what we're dealing with. Again, most of these time tables around 2026, you want to have the information in about around 2025,

but one of the abandonments that are on the list is out with the staff, but they list them out as potential gravel packed reason for abandonment.

I have had experience at a prior well where it became encrusted so that's things are shelving off. They're breaking off and blocking your veins that are coming into your aquifer. I've had success where companies came in and they oversized the bore. On the way out, they can remove that encrustment. I'm not guaranteed success on all of this. I just know I've seen it at one well before.

It did lower your yield rate some, but it kept your well into production, which was important in that factor. Again, information for here tonight, I have just came across my radar. I thought, "Okay. Well, we need to plan because again these permits are now granted for 15 years." If you're going to go ask for more capacity, for example, like, we look for for Dahlgren, there's a modification process.

If it's larger amounts then you're just looking to basically start a new with your permit. This is something, again, just came across the radar. I want to make you aware of it, and staff will start putting together a plan to bring back for you to review and give your blessings.

Mr. Bennett:

I have one more question, hopefully only one I know. DEQ was worried that this well has this gravel encrusting, or whatever you want to call it. What is that based on? How do they know that?

Mr. Weakley:

I don't have an answer for that, sir. I'm sorry I don't have an answer for you tonight. I will go find you an answer. Obviously, that information has to come from some source. They did point back that they didn't have the geophysical logging. I don't know if those are assumptions that are built into that. That's why I think it's important to have that information to use, to check the water quality, to check the yield. I do not know how they came to that conclusion.

Mr. Bennett:

Is the borehole geophysics designed to find out if that's the case?

Mr. Weakley:

It's designed to look at number of aquifers you have that you are pulling from. Water quality, as Mr. Parker informed, it is to give you an idea, because these observatory wells will be near the production well. You can't go 500 feet, or I should use a more extreme circumstance. You can't go a half-acre an acre beyond where you're drilling.

They want these observatory wells as close as possible to your production well because they have assumptions in there that that observatory well would match either water quality, your rates that you have in your production well. I will have a note, sir, to find out. Anyway, I have the name of the presentation. I'll track it down with DEQ.

Mr. Bennett: Thank you, Mr. Weakley.

Mr. Weakley: On the wastewater side, actually we had our provider out today going over our belt press. That equipment thought I heard today was 17 years I think of service. It seems a lot of service throughout the year. It is our only solids handling facility. We're hearing good things that maybe some minor maintenance, no major overhaul. That was good news. We'll get an official report hopefully next week.

Also, they were given any tips or observations to operations staff, whether you need to slow your belt down or add some more tension or just some operational suggestions. We do look forward to that report next week. I do think and as I lead into my next bullet point, it is a good idea that if your equipment hasn't been reviewed or evaluated in some time, you should bring in folks to give you some idea of major overhauls replacement because everything will at some point reach a point of life. Mr. Bennett, do you have a--?

Mr. Bennett: The belt press inspection was just routine maintenance. There were no problems that initiated that.

Mr. Weakley: I know Mr. Majesco was on site today. We didn't get any indication of any major overhaul. They're going to give a report.

Mr. Bennett: What I'm asking is you brought them in just on a regular site review rather than because we were having problems. Is that right?

Mr. Weakley: That is correct. We are in budget season. It would have been nice if I had them in October. I'm sorry it's right on the Hill of our budget, but I wanted to know, "Okay. Do we have major overhaul expenses? Or, even from capital planning, are we two, three, four years out?" I'll be anxious to see what's in the report, but we don't have any feedback from them that when they were on site that, "Wow. You guys are looking at major overhaul this year."

There are some components that would get replaced every so often, like the belt itself. If you think of a printing press, like a web and there it's rolling around rollers, that's what's happening here in the sludge

production. It seemed like good news today, but it was because it's been 17 years. It needs to be looked at and it's a big-time investment and important equipment operation for the Service Authority. It's a good question.

Ms. Binder:

As I'm someone who always says preventive maintenance, I'm very happy.

Mr. Weakley:

I appreciate that. That leads into the second bullet there. Mr. Bennett caught me in that activity today. Actually no, this is the aqua aerobics portion. I'll get to the water in my next slide. Aqua aerobics, some of their fields folks were on site today, but we've got a proposal being worked up. They're going to come out.

We have variety of their equipment at sites. We have filters at Purkins and Dahlgren that are aqua aerobics and then we have the full fledge aqua aerobics design of our SBRs at Fairview Beach and Hopyard. There are a couple of things we have coming up. One, there's an onsite factory visit where they actually will... I don't know if it's fly you out, I believe. They put you up at their expense and they have some onsite training there. They'll go through their equipment, but they can do a lot of field simulation there. That's going to be one part. There's a second part of this where there are field staff will not only come out and do an evaluation of that equipment I just mentioned, but they will also provide some onsite training.

Which that's been a constant that I've heard from our staff since I've been here is that they've may have been assigned to the plant, but a full-fledge training of the SBR system, more so beyond just your pages in your own MA. Again it's networking with these folks, reaching out to them. They're here anytime you have process issues. If you can't figure it out, they're the design folks you can reach out to. They are a resource.

Again, it's one of those maintenance checks. We have some systems such as Hopyard. You'll hear staff mention, it's not fully automated. Did we ask for that in the programming? Did we tweak something different since the plant was installed? Are we at the baseline where we need to be? Again, I deal well with list. I want to know what all the issues are, or what we need to work on and then we can build in budgeting. We can build in time, but this is more of a wellness check if you will.

Then some other things. I reported this first bullet point at our budget meeting. We have reached our projected 50 full-service connections.

Actually, I believe Patty informed me today; there was six or seven more we added just today. That's good for our revenue. Again, 50, we want to be conservative. Again, you get a chance to go back to your audit I believe is page 65 is takes out to my mind that has our connections.

The cumulative connection increases since 2010. I think it was worth mentioning again to the general public as well. We have had our first kickoff meeting with Munibilling. I think that went well. Once we got started. We realize that we will have to have weekly meetings in order to be successful. For right now, our projected rollout is April the 1st, 2020, and we will put out mailers to our customers.

We will utilize KG alert. We will also use our website. What we want to do with that mailing in the KG alert, we want to pull them all back to our website. April 1st is our target. There are many weekly meetings to have information flowing back and forth. I appreciate all of team members. I know Chris has a data dump that he's working on form. Our treasurer, Mr. Jones involved, Ms. Ward, financiers, many of folks from the KG team that is working to make that April 1st a possible. Madam Chair, that's all I have for my report.

Ms. Binder: Thank you. Do we have a motion to adjourn?

Mr. Bennett: Not yet. I have one thing.

Ms. Binder: One question?

Mr. Bennett: I have one thing. Mr. Weakley and I talked about this a little bit after the last budget work session. Our five-year plan has 50 connection fees a year built into it. That's about a million dollars. You'll see in the audit report that Mr. Weakley handed out, but that number stayed pretty silently above 50. Hopyard has been cranking out about 50 homes a year. They've kept up that pace and they've got another 400 or so to build. That gets us another eight years roughly at that number.

If any of these other developments do come along, the point I want to make, and Mr. Weakley and I discussed this briefly today is I think as a Board, we should consider at some point these connection fees should not just go into the regular budget. They should go in the capital improvements, or they should go into debt mitigation. I don't know where they should go. That's something for Davenport and people who are better at that kind of stuff than I am.

I think we ought to think about that down the road, that if there's all these other developments on the horizon, the Planning Commission said. Hopefully that will endure or to our benefit, we will get more connections to these than we've been getting if we have multiple developments going on, but we ought to be thinking in advance. If we are blessed with that someday, what are we going to do with it? I don't think we should just... I don't want to say squander it, that's not the right word, but to just put it back into the regular budget for operating expenses probably isn't the smartest approach.

Ms. Binder: Reallocate it. How's that for--?

Mr. Bennett: Yes, just have some sort of planning. I mean, we want to get our debt down. We have capital improvements, maybe we use some of it for each once we hit our 50 or 55 or 60 or whatever. It's just something to be thinking about in the future. Thank you.

Ms. Binder: It's a good thought.

Mr. Weakley: I would concur, Mr. Bennett, one of the things that five-year rate plan was trying to accomplish is to get us to where the revenues, which is i.e. the billing page for your operational side where your connections would go back to infrastructure. We've got ways to get there, but that was the start that the Board approved last year, living off of connection fees for operations. I mean that doesn't really leave much for capital. That's a very good point. I believe we're on our way to that.

Ms. Binder: It's a positive step. You have anything else?

Mr. Bennett: No, ma'am.

Ms. Binder: How about a motion for adjournment?

Ms. Cupka: We're talking for the next budget work session, right? Is the date I need to get provide?

Ms. Binder: Yes.

Ms. Cupka: I move that the King George County Service Authority Board of Directors adjourn to February 27th, 2020 at 6:30 PM.

Ms. Binder: Do I have a second?

Members: Second.

Ms. Binder: Any discussion? All those in favor?

Members: Aye.

Ms. Binder: Any nay? Chair votes aye. Motion carries, and we are adjourned.