

Berger, Amanda A

From: Berger, Amanda A
Sent: Tuesday, May 11, 2021 4:39 PM
To: [REDACTED]
Cc: Krueger, Robert D; Rhodes, Peter B; [REDACTED]
Subject: RE: [EXTERNAL] Stoneridge/Sedgefield water system (ID: NC0368185)

Good afternoon [REDACTED] –

That result was due to the filter contractor taking the sample at the incorrect location post filter installation and reporting it as such. Unfortunately, it was not caught until after I submitted my testimony since I was not involved in the project submission. It was submitted and approved before I took over the program. The filter was installed at George's Grant #1. As you can see, the combined was almost 1.9 mg/L.

Please see historical results reported to the Public Staff at time of approval.

TABLE 1: Approved and Active Wells on Proposed System

Well Name and No.	Capacity (gpm)		12-Month Avg. Pump Runtime (hrs/day)	Most Recent Inorganic Sampling Results	
	App.	Current		Fe (mg/L)	Mn (mg/L)
Georges Grant Well #1	68	50	11	1.3	0.63
Georges Grant Well #2	48	50	10	N/D	0.02

Thank you,
Amanda

From: [REDACTED]
Sent: Tuesday, May 11, 2021 4:22 PM
To: Berger, Amanda A; [REDACTED]
Cc: Krueger, Robert D; [REDACTED]; Rhodes, Peter B <PBRhodes@aquaamerica.com>; [REDACTED]
Subject: Re: [EXTERNAL] Stoneridge/Sedgefield water system (ID: NC0368185)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Amanda:

One of the more attentive residents here had a question pertaining to 'Berger Direct Exhibit C' in your testimony that you forwarded to us last month. (I am copying Dr. Smith on this email along with Prof. Ollis, another interested

resident.) Specifically, in the table labeled 'Manganese Dioxide Removal Efficiency' you provide pre- and post-filter concentrations of Fe and Mn as follows for the Georges Grant (Bayleaf) filter:

Fe .008 mg/L .001 mg/L

Mn .017 mg/L .008 mg/L

Why is there even a filter in place for these low concentrations of Fe and Mn? These measurements do not seem consistent with the requirements for the Group 1 site designation provided in Exhibit B.

Thanks, [REDACTED]

On 4/6/21 10:24 AM, Berger, Amanda A wrote:

Good morning [REDACTED],

First, I owe you some links that I promised during our conversation on Wednesday. Apologies, my left wrist is slowly returning to normal and I have been “attempting” to follow doctor’s orders with respect to typing.

In addition to the links I promised, I am also including a partially redacted (removed system maps and well documents) of my testimony in the last rate case. I am including as I think it will help explain more about our secondary WQ program, in addition it provides an example of an Executive Summary that is required to be submitted and approved by the Public Staff (and NCUC) for WSIC recovery on a secondary WQ project. Key points on the secondary WQ plan –

1. Iron and manganese are not regulated. Yes, there is a Secondary Maximum Contaminant Level (SMCL), but it is not a regulatory requirement in NC to physically remove the contaminant when it exceeds those numbers. There is only a requirement to treat (see bullet 3). This complicates the process.
 - a. Ex. Primary MCLs do not require pre-approval and there is an expectation that they are removed before an exceedance.
 - b. SMCL’s do not fit into this category and there is an expectation to demonstrate that there is no other alternative to physical removal.
2. The secondary WQ plan was a collaborative process with NCDEQ and the Public Staff of the NCUC. While I was not at Aqua during its development, it was heavily scrutinized by all regulatory agencies and accepted to ensure WQ goals are met while keeping water rates affordable for our customers.
3. Sequestration – chemical treatment, not physical removal – has been the accepted treatment method for Fe + Mn < 1.0 mg/L (above sMCLs..) for many years. It is only with recent research and revised standards has this standard been lowered to < 0.5 mg/L. Even such, it only applies to new infrastructure in NC under current design standards. It is not a regulation.
 - a. Treatment for SMCLs is defined as chemical treatment or physical removal. To Rick’s point, sequestration is treatment and was/is approved as treatment for the wells in your system.

4. While time-consuming, the filtration approval process is a necessary component to ensuring that Aqua is prudent with your rate dollars. Aqua currently has approximately 75 Group 1 wells. If we installed filtration on each with an average cost of \$375k/filter it would be a \$26 million investment. In several instances, Aqua has addressed these sites through other methods to keep costs down and improve WQ. These individual assessments take time.
5. The WQ in your system is complex. I was not able to elaborate in our last meeting, but there is not a simple solution to address the WQ in your neighborhood. Recognizing this, Aqua contracted a leading WQ expert – Cornwell Engineering– to complete a thorough review of your water system in 2019/2020. Dr. Cornwell and his associates are considered among the best in the nation and there were lengthy discussions on how to address your WQ. Aqua is currently working through these systematic recommendations. It is not an overnight process due to attempting to balance chemical reactions in a real-world setting. I can explain further in an upcoming call.

Finally, I appreciate the uncomfortable conversations that will occur in this process. I have worked at 5 utilities, 3 municipalities, and I have never participated in HOA meetings at this level or with this extensive type of dialogue. Not that these types of issues did not exist at those utilities, but the opportunity to engage with customers was not provided nor endorsed. This is a great opportunity to educate each other on the issues and collaborate on solutions. Thank you Bill for coordinating. I know that this is work and appreciate you providing this forum for us both. Look forward to future conversations.

<http://www.ncwaterquality.com/>

<https://www.pwss.enr.state.nc.us/NCDWW/>

PWS ID: NC0368185

PWS Name: Stoneridge Master

** You can use either to search

<https://www.aquaamerica.com/>

Let me know if I forgot to include links.

Best regards,

Amanda



Amanda Berger

Director, Environmental Compliance

Aqua North Carolina

202 Mackenan Court; Cary, NC 27511



OFFICIAL COPY

From: [REDACTED]
Sent: Tuesday, April 6, 2021 9:53 AM
To: Krueger, Robert D [REDACTED]
[REDACTED] ger, Amanda A [REDACTED]
Subject: Re: [EXTERNAL] Stoneridge/Sedgefield water system (ID: NC0368185)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Rob:

Thanks for your emails today and I appreciate your concern. Emotions have occasionally run high here on many topics (and not just about water) and I don't understand [REDACTED] email. I do believe though that we are all trying in our own way to pull on the same end of the rope but my apologies for the setback. Our committee is unstructured and is open to all neighbors, and other than in a Zoom meeting there is no mute switch. Even getting them in a meeting is like herding cats but I'll do my best to keep a positive dialog going. Everyone knows, or should know here that our solutions depend upon Aqua's good work. I'll pull [REDACTED] from the cc list going forward.

There actually was some relatively good news today. We had not realized that one of our wells had been down (Stoneridge #1) but one neighbor reported demonstrably improved water quality since it was returned to service. I'm guessing that they received water from Sedgefield #5 during the outage. I'm trying to determine how many of our complaints were from when #1 was down.

Best wishes, [REDACTED]

On 4/6/21 8:34 AM, Krueger, Robert D wrote:

[REDACTED]

I have opened this communication as a way to address concerns in your community in a professional manner. I put aside the fact that Rick started to make threats last week. Now he is sending in my opinion, childish remarks to a situation that is very important to all of us. This committee will need to take a side seat if this behavior continues. We truly care about your concerns and cannot properly address these concerns when we have this going on in the background.

I hope you understand...

Thanks,

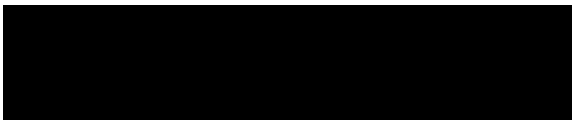
Rob



Robert D. Krueger

Central Area Manager

Aqua North Carolina, Inc.



From: **Main Rick Chat** <[REDACTED]>
Sent: Tuesday, April 06, 2021 8:26 AM
To: Krueger, Robert D <[REDACTED]>
Cc: **Bill Black** <[REDACTED]>, hodes, Peter B <PBRhodes@aquaamerica.com>;
Berger, Amanda A <[REDACTED]>
Subject: Re: [EXTERNAL] Stoneridge/Sedgefield water system (ID: NC0368185)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Ah! There it is. Our UC public staffer (AKA, fox regulating the henhouse) giving Aqua a quite considerable concession.

On Apr 6, 2021, at 8:16 AM, Krueger, Robert D
<[REDACTED]> wrote:

Good morning [REDACTED],

Let me get with my team on these dates and get back to you. The next meeting will have to be a zoom call for we are not fully released on in person gatherings at the moment. As far as the individual or combined threshold concentrations, that is a threshold that Aqua has instituted and in agreement with the Public Staff of the North Carolina Utilities Commission to prioritize these filtration projects.

Thanks,

Rob

<image001.png>

Robert D. Krueger

Central Area Manager

Aqua North Carolina, Inc.

[REDACTED]

[REDACTED]

[<image002.png>](#)

[<image003.png>](#)

[<image004.png>](#)

From: Bill Black <[REDACTED]>
Sent: Sunday, April 04, 2021 6:56 PM
To: Krueger, Robert D <[REDACTED]>
Cc: Rhodes, Peter B <PBRhodes@aquaamerica.com>; Rick Johnson
<[REDACTED]>
Subject: Re: [EXTERNAL] Stoneridge/Sedgefield water system (ID: NC0368185)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Rob:

We very much appreciated you making time for us last week and having Amanda and Lynn available for some questions. We'd like to continue the discussions and the time slots below are available for us in April for both the in-person and Zoom meetings. Our preference is for the in-person visit to precede the Zoom call but we would like both to be completed in April as May will be even more difficult to schedule.

One additional question has arisen from the last meeting: Amanda had mentioned that sand filtering can only be considered on a well if manganese and iron exceed an individual or combined threshold concentration. (As I recall, the manganese threshold alone was .3mg/l and the combined threshold was 1 mg/l.) Is this codified someplace or is there a written guideline? If so, please send us a citation or URL so we can read through it. Also, who or what group determined these thresholds and must approve any filter installation?

Thanks, [REDACTED]

In-person on-site discussions with committee members: Most of the 7 member committee have expressed interest in this meeting but we realize that space limitations may preclude this. Please ask Jason or the attending Aqua technician to coordinate this visit with committee

member Jonathan Smith and advise us as to how many of our members may attend and when and where to meet. [REDACTED]

[REDACTED] We wish to minimize the disruption of Jason's schedule but would appreciate scheduling this meeting during one of the following periods:

Monday & Tuesday throughout April - 1PM or later

Wednesday thru Friday throughout April - anytime

Of course, masks and social distancing are required for everyone there. (Most of the interested committee members have already been fully vaccinated.)

Subsequent Zoom meeting:

Intervals marked with an * will lose 1 person but are considered better than not meeting at all

4/8 – any time after 11am

*4/9 – any time before noon or after 2pm

4/12 – 1PM or later

*4/14 – open until 4pm

4/16 – after 2pm (* or before noon)

*4/19 – 1PM or later

*4/20 – any time after 12:30pm

*4/21 – any time after 12:30pm

--

Please consider the environment before printing this message.

Confidentiality Notice: The information in this e-mail and any attachments may be legally privileged and confidential. It is intended solely for the addressee. If you are not the intended recipient, any disclosure, copying, distribution or any action taken or omitted to be taken in reliance on it, is prohibited and may be unlawful. If you have received this e-mail in error, please notify the sender and permanently delete the e-mail and any attachments immediately. You should not retain, copy or use this e-mail or any attachment for any purpose, nor disclose all or any part of the contents to any other person.

--

Please consider the environment before printing this message.

Confidentiality Notice: The information in this e-mail and any attachments may be legally privileged and confidential. It is intended solely for the addressee. If you are not the intended recipient, any disclosure, copying, distribution or any action taken or omitted to be taken in reliance on it, is prohibited and may be unlawful. If you have received this e-mail in error, please notify the sender and permanently delete the e-mail and any attachments immediately. You should not retain, copy or use this e-mail or any attachment for any purpose, nor disclose all or any part of the contents to any other person.

--

Please consider the environment before printing this message.

Confidentiality Notice: The information in this e-mail and any attachments may be legally privileged and confidential. It is intended solely for the addressee. If you are not the intended recipient, any disclosure, copying, distribution or any action taken or omitted to be taken in reliance on it, is prohibited and may be unlawful. If you have received this e-mail in error, please notify the sender and permanently delete the e-mail and any attachments immediately. You should not retain, copy or use this e-mail or any attachment for any purpose, nor disclose all or any part of the contents to any other person.

OFFICIAL COPY