

From: Nancy Love [<mailto:nglove@umich.edu>]

Sent: Thursday, January 21, 2016 1:23 PM

To: Marc Edwards

Subject: Hope you are doing ok

Hi Marc: No need to respond. Just reaching out to say that I hope you are doing ok with all that is going on with the Flint water crisis. I have listened to your various interviews and just saw the Time magazine cover and was recalling what you went through with the Washington DC crisis. I know you are putting your all into helping to both amplify and resolve this crisis and there are so many people who want to thank you for that (myself included), but I also recall how the Washington DC incident affected your health significantly. I hope you are able to take care of yourself to avoid a repeat. Just wanted you to know I'm thinking about you, and if there is anything I can do to help then just let me know what it is.

I've been following this since last summer and used it as part of my ethics module in ENG 100 this past fall. I am in Europe this week and it is a global story. I've not tried to insert myself since there are others, such as Lut and yourself who can offer more technical expertise to the problem, but once the point-of-use filters were handed out last week, they are nearly the same as those that Terri Olson and I have been studying the last few years. We want to share our knowledge about microbial water quality issues that can crop up so the filters are managed correctly and don't cause a secondary problem. But, the priority is getting out the lead. Along those lines, you should be hearing soon from the Michigan team, which Lut is coordinating.

Take care,

Nancy

Nancy G. Love, Ph.D., P.E., BCEE

Professor, Department of Civil and Environmental Engineering

Fellow: Water Environment Federation; International Water Association; Association of Environmental Engineering and Science Professors

University of Michigan

183 EWRE Building

1351 Beal Avenue

Ann Arbor, MI 48109

Voice: (734) 763-9664

nglove@umich.edu

<http://envbiotech.engin.umich.edu/>

Twitter: @Love_H20

From: Marc Edwards <edwardsm@vt.edu>

Sent: Thursday, January 21, 2016 12:59 PM

To: 'Nancy Love' <nglove@umich.edu>

Subject: RE: Hope you are doing ok

Great! Thanks...yes, it is crazy. If you want to write a blurb on the filters we can post it, but it would need to be very centered, because people are worried about everything right now....if it is normal problem it is almost like we do not want to discuss, because they are even afraid to bath or use the filters to remove the lead. The system has completely failed them.

Best Regards,
Marc

From: Shawn Patrick McElmurry
Sent: Friday, August 12, 2016 9:42 AM
To: Paul Evan Kilgore <paul.kilgore@wayne.edu>; Matthew Wayne Seeger <matthew.seeger@wayne.edu>; Marcus Zervos <MZERVOS1@hfhs.org>; 'Laura Sullivan' <lsulliva@kettering.edu>; Nancy Love <nglove@umich.edu>; Susan J. Masten (masten@egr.msu.edu) <masten@egr.msu.edu>
Subject: Latest from FWICC

Quick notes from before FWICC:

Eden warned me that the state does not want me to sample filters. I told her this has a major impact on the science but she indicated that this may be a red line.

In a conversation with Bryce, I brought this up. He indicated that Keith Creigh was particularly concerned about this. He also said the state does not want to find DNA in the water, dead or alive. I told him the purpose of the sampling was to understand how much is in the water and that finding DNA on the filters would show the filters are working. He indicated he understood this and personally would like to have this information but that communicating this was the real issue.

I'm in FWICC now and going to talk with Nick Lyons, Keith Creigh, and others to push back on this. I'm seriously concerned they have no interest in understanding this better but rather they are interested in just pulling out of Flint.

Shawn P. McElmurry, Ph.D., P.E.
Associate Professor
Wayne State University
Dept. of Civil and Environmental Engineering
2158 Engineering Building
5050 Anthony Wayne Dr.
Detroit, Michigan 48202
Phone: 313-577-3876
Fax: 313-577-3881
Skype: s.mcelmurry

On Monday, August 15, 2016, Zervos, Marcus <MZERVOS1@hfhs.org> wrote:
im speechless

Sent from my iPhone

On Aug 15, 2016, at 9:41 AM, Shawn Patrick McElmurry <s.mcelmurry@wayne.edu> wrote:

I wanted to provide a quick follow up to my Friday email sent from FWICC. Before leaving FWICC Gov. Snyder shook my hand and asked how our work was going. My response was that it wasn't...and that he needed to push if he wanted this done. He looked shocked and did not respond with anything more than ok. After the FWICC I had a long discussion with Nick Lyons, Keith Creagh, Eden Wells, George Krisztian, Bryce Feighner. Mike McDaniel, Nick Anderson, and another DEQ employee were present but did not talk. I was directed by Nick to explain all the samples I was collecting, particularly the filter sample, to Keith Creagh, who looked very skeptical. He asked a lot of questions about why we would collect filters, what did we expect to find, etc. Keith and Nick were both questioning scientific value of study. Nick said to me he has to balance the value of finding information and upsetting the public. After our meeting, Nick also said the people at EPA do not think we should do it. After probably 20 minutes, Keith said if George and Bryce were comfortable, then we should do it.

Friday evening, I talked with Bryce again. He confirmed they (MDEQ and state in general) is just very worried we might "find something". I discussed the sampling more with Bryce so he understood what we were doing. He said he would talk with Keith over the weekend and that in the past, Keith has followed his lead. He made it sound like he would advocate for our position.

Then, in a chance encounter, I ran into Sarah Lyon-Callo while waiting to meet with Susan and Nancy in East Lansing at 7pm. I asked Sarah what was going on and she seemed to be completely in the dark of all of this. I believed her. She said as far as she was concerned we were done talking and the contract was signed. She did not express any reservations but she did indicate that Nick was very nervous, particularly given the atmosphere in the state - I took this to be regarding the charges brought against MDHHS staff. Based on this conversation, I believe the problem we have here is purely political.

Finally, I had another conversation over the weekend that I wanted to share. Paul and I were contacted by Vicki Van Buren. The family of the 3rd Legionella case feels as though MDHHS and GCHD are trying to "cover up" the case. She said the family would like to talk to us and have our assistance. I explained to Vicki our predicament regarding our state IRB and funding, and based on the data use agreement we could not initiate contact with the family. I also explained that we have offered GCHD our services multiple times and Suzanne has said no every time. I encouraged Vicki to work with MDHHS and GCHD to help complete a full investigation.

X People [] Plaintiff [] Defense

PROPOSED EXHIBIT NO. 17

Date 9/22/17 Reporter
67th District Court, Genesee County, MI

So, lots of things going here...not sure where they are going. We really are running out of time. With summer nearly complete, I will be losing 2 individuals from my lab that I had planned to work on this over the summer and the other students will only be able to work 20 hrs/week, rather than the 40 hrs/week possible during summer. Worse, my lab is being renovated Sept. 15-Oct. 5 while I will be in Australia. I can't tell you how furious I am with the state, they have completely screwed us and the people of Flint.....enough of my complaining. Today, I plan to revise the IRB consent for the epi portion of the study with Paul's help. I will also send an email to Nick Lyon's stating we need a yes or no answer on doing this. We cannot wait any longer. .

Sorry for the long email. Just wanted all of you to know what was going on.

Shawn

From: Nancy Love [<mailto:nglove@umich.edu>]

Sent: Monday, August 15, 2016 10:03 AM

To: Zervos, Marcus <MZERVOS1@hfhs.org>

Cc: Shawn Patrick McElmurry <s.mcelmurry@wayne.edu>; Paul Evan Kilgore <paul.kilgore@wayne.edu>; Matthew Wayne Seeger <matthew.seeger@wayne.edu>; Laura Sullivan <lsulliva@kettering.edu>; Susan Masten <masten@egr.msu.edu>

Subject: Re: Latest from FWICC

We need to move forward and if state changes their mind now after having known the filters were part of the study for many months, then I will be prepared to state what happened publicly. I have been asked dozens of times for interviews about Flint and have turned them all down until i had data to discuss. I will be ready to give interviews if we are not supported by the state to do the scientifically appropriate work we are trying to do.

Nancy

Subject:RE: Latest from FWICC

Date:Mon, 15 Aug 2016 15:00:07 +0000

From:Shawn Patrick McElmurry <s.mcelmurry@wayne.edu>

To:Nancy Love <nglove@umich.edu>, Zervos, Marcus <MZERVOS1@hfhs.org>

CC:Paul Evan Kilgore <paul.kilgore@wayne.edu>, Matthew Wayne Seeger <matthew.seeger@wayne.edu>, Laura Sullivan <lsulliva@kettering.edu>, Susan Masten <masten@egr.msu.edu>

I'm prepared to try and incorporate as much of this into the NIH project as possible as well. More soon.

From: Shawn McElmurry [<mailto:s.mcelmurry@wayne.edu>] **Sent:** Thursday, January 5, 2017 12:39 PM

To: Marc Edwards <edwardsm@vt.edu>

Cc: Nancy Love <nglove@umich.edu>; Paul Kilgore <paul.kilgore@wayne.edu>

Subject: Quick phone call before Jan 10th meeting

Hey Marc, Happy New Year!

I'm interested in talking with you before the Jan. 10th meeting. I know right before the holiday's you reached out asking if I would be comfortable joining you in saying the water in Flint was greatly improved. I would like to share with you why I was hesitant to say this and continue to have questions. Could we talk sometime before Monday at noon? Weekend is ok too.

I'd like to keep this small but would like to have Paul and Nancy join me for the call.

Thanks,
Shawn

Shawn P. McElmurry, Ph.D., P.E.
Associate Professor
Wayne State University
Dept. of Civil and Environmental Engineering
2158 Engineering Building
5050 Anthony Wayne Dr.
Detroit, Michigan 48202
Phone: 313-577-3876
Fax: 313-577-3881

←-----After Phone Call-----→

From: Marc Edwards <edwardsm@vt.edu>

Sent: Friday, January 6, 2017 12:43 PM

To: 'Pruden-Bagchi, Amy' <apruden@vt.edu>

Subject: Phone call

She is just gung ho that the regrowth is a serious drawback of filters-- any attempt to reason with her is pointless.

I asked her to consider speaking with you about regrowth.

She thought that Flint was the only place POU was significantly installed.....hopefully, I corrected that, but I am not sure she even heard that to be honest.

Spewed about multi-barrier and compromised system, and I could not even get a word in edge wise about that. Nancy at her worst.

Marc

From: Marc Edwards [<mailto:edwardsm@vt.edu>]

Sent: Friday, January 6, 2017 6:02 PM

To: Shawn McElmurry <s.mcelmurry@wayne.edu>; apruden@vt.edu

Subject:

Shawn,

POU end of faucet filters are very commonplace and many of them are carbon block.

The best estimate I have is that they are installed in about ¼ of US homes. They are sold in virtually every big box hardware store and wal-mart in the country.

Have been for decades.

All of them have some effectiveness for cyst and microbial, the only question is whether they meet certification or not.

5 log increase in bacteria in such filters after stagnation regrowth are commonplace.

I can also tell you over the years, that it is not uncommon to get a million cfu/mL in parts of a system with low chlorine residual and a galvanized iron pipes.

No distribution system monitoring sites would ever use a site with a galvanized iron service for that very reason.

Was there any other specific references or insights that you wanted?

Marc