From: Karoly, Cyndi [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=57D607F9F8AF4584AEFEDB666C924EBF-CBKAROLY]

Sent: 6/22/2017 2:39:21 AM

To: Culpepper, Linda [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=73d475cbae324a29b87e1711dc9a79c5-lmculpepper]

Subject: Re: Favor -- FW: Discussion for sampling and analysis in Wilmington

I'll discuss with them in the morning.

Sent from my iPad

On Jun 21, 2017, at 10:34 PM, Culpepper, Linda < linda.culpepper@ncdenr.gov> wrote:

Can you check in with Chris and Dana to see if we are good on the QAPP aspect? I assumed the regions have a QAPP for routine sampling that this project would fall under, but there may be different documentation needed. I want to make sure everyone has what they need. Please let me know if there are any gaps – thank you!

Linda Culpepper Deputy Director Division of Water Resources North Carolina Department of Environmental Quality

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From: Satterwhite, Dana

Sent: Wednesday, June 21, 2017 12:06 PM

To: Culpepper, Linda < linda.culpepper@ncdenr.gov>; Johnson, Chris < chris.johnson@ncdenr.gov>;

Brantley, Mark <mark.brantley@ncdenr.gov>; West, Steve <steve.west@ncdenr.gov>

Cc: Karoly, Cyndi <<u>cvndi.karoly@ncdenr.gov</u>>; Jones, Nick <<u>nick.jones@ncdenr.gov</u>>; Huffman, David J <david.huffman@ncdenr.gov>

Subject: RE: Discussion for sampling and analysis in Wilmington

I am happy to help in any way that is needed; however, I do not feel comfortable taking the lead when I haven't been a part of any briefings on the objectives of the sampling events, the sampling plan, etc. I am available to help review the QAPP, sampling plan, laboratory SOPs, etc. and make comment, but I am hoping others on this email have more background/information on this sampling and will be able to provide the necessary direction. I do not believe anyone here at the lab has gotten a copy of the QAPP, sampling plan, etc.

Regards, Dana

Dana Satterwhite

Environmental Program Supervisor III

<u>WW/GW Laboratory Certification Branch</u>

North Carolina Department of Environmental Quality/Division of Water Resources

919 733 3908 ext. 202 office dana.satterwhite@ncdenr.gov

Water Sciences Section

1623 Mail Service Center Raleigh, NC 27699-1623

<image001.png>

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From: Culpepper, Linda

Sent: Wednesday, June 21, 2017 8:31 AM

To: Satterwhite, Dana < dana.satterwhite@ncdenr.gov>; Johnson, Chris < chris.johnson@ncdenr.gov>;

Brantley, Mark <<u>mark.brantley@ncdenr.gov</u>>; West, Steve <<u>steve.west@ncdenr.gov</u>> Cc: Karoly, Cyndi <<u>cyndi.karoly@ncdenr.gov</u>>; Jones, Nick <<u>nick.jones@ncdenr.gov</u>>

Subject: RE: Discussion for sampling and analysis in Wilmington

I need you to work together on the sampling plans to ensure they meet the requirements. Who can take the lead?

Thank you, linda

Linda Culpepper Deputy Director Division of Water Resources North Carolina Department of Environmental Quality

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From: Satterwhite, Dana

Sent: Wednesday, June 21, 2017 7:19 AM

To: Johnson, Chris <<u>chris.johnson@ncdenr.gov</u>>; Culpepper, Linda <<u>linda.culpepper@ncdenr.gov</u>>

Cc: Karoly, Cyndi <cyndi.karoly@ncdenr.gov>; Jones, Nick <nick.jones@ncdenr.gov>

Subject: RE: Discussion for sampling and analysis in Wilmington

I think Chris captured it. I do have something to add. I have not been privy to any discussions regarding the sampling plan, so disregard if these things have been discussed. At a minimum:

- <!--[if !supportLists]--><!--[endif]-->| would recommend initiating chain-of-custody for these samples at collection.
- <!--[if !supportLists]--><!--[endif]-->I think it would be prudent to include Field Blanks with this sampling event, especially with the target analyte(s) of interest.
- <!--[if !supportLists]--><!--[endif]-->Field duplicates, at least one for each sampling team, might also be considered.
- <!--[if !supportLists]--><!--[endif]-->I would have a plan for dealing with divergent data results since samples are being split between only two labs.

- <!--[if !supportLists]--><!--[endif]-->Consider how the data will be used if reporting levels between the two labs are significantly different.
- <!--[if !supportLists]--><!--[endif]-->| would get copies of both labs' Standard Operating Procedure for the analysis to ensure we have an understanding of how each set are handled and analyzed. Ensure that each region (i.e., FRO and WiRO) is collecting and handling the samples in the same manner. Clean technique?
- <!--[if !supportLists]--><!--[endif]-->Ensure that samples will be treated similarly upon receipt at each lab (e.g., stored at room temp vs under refrigeration until analysis).
- <!--[if !supportLists]--><!--[endif]-->Ensure our lab treats each set of samples similarly upon receipt. It is my understanding that the first set of samples, received at room temperature are being stored under refrigeration.
- <!--[if !supportLists]--><!--[endif]-->| would include a detailed description of our procedure for collecting and subsampling/splitting of samples in the QAPP.
- <!--[if !supportLists]--><!--[endif]-->I would consider requesting matrix spike analyses; at least for an initial sampling, at each site.

Regards, Dana

Dana Satterwhite

Environmental Program Supervisor III

<u>WW/GW Laboratory Certification Branch</u>

North Carolina Department of Environmental Quality/Division of Water Resources

919 733 3908 ext. 202 office dana.satterwhite@ncdenr.gov

Water Sciences Section 1623 Mail Service Center Raleigh, NC 27699-1623

<image002.png>

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From: Johnson, Chris

Sent: Tuesday, June 20, 2017 4:16 PM

To: Culpepper, Linda < iinda.culpepper@ncdenr.gov>

Cc: Satterwhite, Dana <dana.satterwhite@ncdenr.gov>; Karoly, Cyndi <cyndi.karoly@ncdenr.gov>

Subject: RE: Discussion for sampling and analysis in Wilmington

I will review Andrew's email and connect with the regional offices.

I was not able to answer all of EPA's questions. Some of them include:

- <!--[if !supportLists]--><!--[endif]-->What is the status of the QAPP? I told them that a committee was working on it and someone from that group could address this.
- <!--[if !supportLists]--><!--[endif]-->What specific target analytes are we interested in seeing? (Some analytes are qualitative / others can be quantified)

- <!--[if !supportLists]--><!--[endif]-->Who will be responsible for dissemination of results and how will that take place?

Our sample bottles are 500mL but the lab prefers 1L of sample for possible dilution and QC reasons. For the time being, they are OK with getting 2 of the 500mL bottles for each site, but a single one-liter sample is better from a reproducibility standpoint. Preservation will be nitric acid / still waiting to find out about shipping / storage temperature – it may be discussed in the document that Andrew Lindstrom sent, I haven't had a chance to review yet.

Apparently, there have been other related sampling events in the last few months. Some were taken by either EPA or NCSU about a month ago with no results as of yet. Apparently, there were results from December 2016 of ~100ppt near Tarheel / Smithfield Processing and upwards of 6000ppt at Lock & Dam #3 / Huske Dam near the company outfall.

It was suggested that check samples be prepared at a couple different levels to confirm recovery since two labs will be running the tests. I believe Mark Strynar is going to prep those samples.

The questions you had asked me to pose:

- <!--[if !supportLists]--><!--[endif]-->We can have results in 1-2 weeks after samples have been submitted
- <!--[if !supportLists]--><!--[endif]-->Their detection limits are from ~10ng up to a max of ~500ng. Any samples recovering above the upper limit are handled by isotope dilution
- <!--[if !supportLists]--><!--[endif]-->They are prepared to handle a maximum of 50 samples. Apparently, this was the number that was previously discussed.
- <!--[if !supportLists]--><!--[endif]-->Their method can detect a number of possible constituents that may be encountered from the company's outfall. (We will need to either provide a list of analytes of concern or be prepared to deal with any that might be reported.)

I copied Dana Satterwhite on this email. She can correct me if I misstated anything. Things moved pretty rapidly during the call and I want to make sure I didn't forget anything.

Chris Johnson NC DEQ-DWR Water Sciences Section

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From: Culpepper, Linda

Sent: Tuesday, June 20, 2017 3:17 PM

To: Johnson, Chris <chris.johnson@ncdenr.gov>

Subject: FW: Discussion for sampling and analysis in Wilmington

Chris – will let you discuss this with the Regional Offices rather than getting in the middle of the communication.

Share any updates from your call. Thanks.

We just finished the risk assessment conf. call. EPA is working on their re-review to include the ingestion of water pathway.

As I understand, the original TSCA risk assessment focused on work exposure via inhalation and dermal.

I still need to forward you the DEQ/DHHS conf. call info.

Linda Culpepper Deputy Director Division of Water Resources North Carolina Department of Environmental Quality

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