Message

From: Sullivan, Kate [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1AE54D9BB036451B8DF78D633B928662-SULLIVAN, KATE]
Sent: 8/6/2019 7:25:12 PM
To: Buckley, Timothy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=197a3461d9824a17850f34cc2b0b37fe-Buckley, Timothy]
Subject: RE: NJDEP request for EPA-NERL lab analysis

I should be able to do that.

From: Buckley, Timothy <Buckley.Timothy@epa.gov>
Sent: Tuesday, August 6, 2019 1:50 PM
To: Sullivan, Kate <Sullivan.Kate@epa.gov>
Subject: FW: NJDEP request for EPA-NERL lab analysis

Kate,

Let me know if you are able/willing to amend the QAPP by the end of the week. I think it will be pretty straight forward given existing QAPP and Erica's request.

Tim

From: Buckley, Timothy
Sent: Tuesday, August 6, 2019 1:48 PM
To: Bergman, Erica <Erica.Bergman@dep.nj.gov>
Cc: Azzam, Nidal <Azzam.Nidal@epa.gov>; Maybury, Steve <Steve.Maybury@dep.nj.gov>; Goodrow, Sandra <Sandra.Goodrow@dep.nj.gov>; Watkins, Tim <Watkins.Tim@epa.gov>; Sullivan, Kate <Sullivan.Kate@epa.gov>; Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; McCord, James <mccord.james@epa.gov>; Strynar, Mark <strynar.mark@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>; Washington, John <Washington.John@epa.gov>
Subject: RE: NJDEP request for EPA-NERL lab analysis

Erica,

I do think that it will be easier to amend the existing QAPP to reflect this new work and objectives.

Tim

Timothy J. Buckley, Ph.D.
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EMAIL: buckley.timothy@epa.gov

From: Bergman, Erica <Erica.Bergman@dep.nj.gov>
Sent: Monday, August 5, 2019 2:26 PM

To: Buckley, Timothy <Buckley.Timothy@epa.gov>
Cc: Azzam, Nidal <Azzam.Nidal@epa.gov>; Maybury, Steve <Steve.Maybury@dep.nj.gov>; Goodrow, Sandra <Sandra.Goodrow@dep.nj.gov>; Watkins, Tim <Watkins.Tim@epa.gov>; Sullivan, Kate <Sullivan.Kate@epa.gov>; Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; McCord, James <mccord.james@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>; Washington, John <Washington.John@epa.gov>
Subject: RE: NJDEP request for EPA-NERL lab analysis

Tim,
Thank you for your email and offer to analyze NJDEP samples. I am inquiring with the DEP contract manager regarding contractor's availability to conduct sampling during this time period and I will get back to you as soon as possible. Is your request to amend the QAPP/Study Plan because it would be easier to amend vs write a stand alone QAPP? I'm asking since the goals or the original Study Plan are very different from this sampling (treatability testing of POETs).

Also, as an FYI, Solvay's law firm (Fox Rothchild) has requested written copies of EPA/NERL analytical methods for aqueous and non-aqueous analysis relative to the PFAS study. DEP will defer to EPA to release these documents through a FOIA request.

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From: Buckley, Timothy <Buckley.Timothy@epa.gov>
Sent: Friday, August 2, 2019 11:18 AM
To: Bergman, Erica <Erica.Bergman@dep.nj.gov>
Cc: Azzam, Nidal <Azzam.Nidal@epa.gov>; Maybury, Steve <Steve.Maybury@dep.nj.gov>; Goodrow, Sandra <Sandra.Goodrow@dep.nj.gov>; Watkins, Tim <Watkins.Tim@epa.gov>; Sullivan, Kate <Sullivan.Kate@epa.gov>; Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; McCord, James <mccord.james@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>; Washington, John <Washington.John@epa.gov>
Subject: [EXTERNAL] RE: NJDEP request for EPA-NERL lab analysis

Erica,

I apologize for the delay in responding to your request. It has taken some time to process this request across my management chain to ensure all are agreeable to the commitment and to evaluate incorporating these samples into our laboratory work flow. My Lab Director, Tim Watkins has agreed that we can accept these additional samples. Our RTP laboratories are just coming back on-line after being shut down for the last month or so for ventilation upgrades so we

are in better shape a accommodate these samples. I would like to suggest the following schedule for managing these samples.

- Week of 8/5 we will amend the QAPP/Study Plan to reflect this effort
- Week of 8/12: We will provide sample containers, field blanks, and field spikes
- Before end of Aug: You will collect samples and ship to RTP
- Week of 9/2: We will analyze samples
- Week of 9/16: Data analysis and interpretation
- Week of 9/23: We will report preliminary results via conference call
- Week of 9/30: We will provide formal report

Per your request, our reporting will be based on non-targeted analysis providing semi-quantitation of ClPFPECA.

Let me know if this schedule does not meet your needs.

Tim Buckley

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From: Bergman, Erica <Erica.Bergman@dep.nj.gov>
Sent: Tuesday, June 25, 2019 4:56 PM
To: Buckley, Timothy <Buckley.Timothy@epa.gov>
Cc: Azzam, Nidal <Azzam.Nidal@epa.gov>; Maybury, Steve <Steve.Maybury@dep.nj.gov>; Goodrow, Sandra <Sandra.Goodrow@dep.nj.gov>
Subject: NJDEP request for EPA-NERL lab analysis

Tim,

NJDEP is in receipt of some preliminary analytical information from EPA-NERL regarding the detection of chloro-perfluoro polyether carboxylate (ClPFPECA) congeners (known to be Solvay's PFAS replacement) in aqueous samples that correspond to several private drinking water locations. These samples were collected as part of the NJDEP-EPA-NERL and EPA Region 2 cooperative study "Detection, Evaluation, and Assignment of Multiple Poly- and Perfluoroalkyl Substances (PFAS) in Environmental Media from an Industrialized Area of New Jersey". EPA-NERL could not definitively quantify ClPFPECA due to the lack of an analytical standard, however potential concentrations could be elevated due to peak heights relative to known concentrations of other PFAS.

There is also a potential for human toxicity when exposed to these congeners, since NJDEP received Safety Data Sheets submitted by Solvay, which indicate toxicity in lab animals, specifically 28 day and 90 day repeated dose toxicity studies in rats which indicated that these PFAS cause liver toxicity at very low doses. NJDEP's toxicologist, Gloria Post Ph.D. DABT conducted a full review of Solvay's submittal and reports:

> "...the No Observed Adverse Effect Level (NOAEL) for three CAS #s in the 28 day rat study were below 0.3 mg/kg/day. This means that 0.3 mg/kg/day was the lowest dose used in the study, and that toxicity occurred at that dose. Therefore, a dose that did not cause toxicity (NOAEL) was not identified. For the 90 day rat study, the NOAEL was 0.05 mg/kg/day in males and 0.1 mg/kg/day in females. Since the same doses were likely used in both males and females, this indicates that toxicity occurred in males at 0.1 mg/kg/day (a very low dose). For comparison, the levels at which toxicity occurred for this substance are similar (or possibly even lower) than for PFOA and PFNA."

The private potable wells with detections of ClPFPECA congeners currently have Granular Activated Carbon (GAC) Point of Entry Treatment Systems (POETs) installed due to past detections of other PFAS (i.e., PFNA, PFOA) above NJDEP Groundwater Quality Standards, or Preliminary MCLs. However, it is unknown if the POETs are treating the ClPFPECA since there are no known treatability studies for this compound. NJDEP would like to sample 4-5 private well locations, including influent, mid-fluent and effluent samples for each location. This would be approximately 15 samples, not including QC samples. Does EPA-NERL have the capacity to analyze these aqueous samples for the ClPFPECA congeners? This analysis request could be considered outside the research study, and be more geared towards a public health concern/priority.

Please let us know if EPA/NERL can conduct this analysis and if so, when would they have the capacity? As discussed with Nidal Azzam (copied here), EPA-Region 2 shares our concerns regarding a potential public health issue and plan to support DEP's request for NERL analytical support. Please let me know if you need any additional information.

Thank you,

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