To: Scott Smith[ssmith@waterdefense.org]
Cc: feighnerb@michigan.gov[feighnerb@michigan.gov]; Johnson, Mark[johnson.mark@epa.gov]
From: Durno, Mark
Sent: Mon 4/4/2016 4:05:57 PM
Subject: RE: Water Defense Summary Testing & Lab Reports - Re: Health complaint sampling results

.....
,,,,,,,,,,,,
Scott,

Late last week, our expanded hot water sampling was initiated – we should have data rolling in later this week. Once we have a complete package, we'll get the preliminary summaries out.

You mentioned new significant data/information. Is there anything else on your end other than what you sent us already? Summaries are fine – no need to send full lab packages.

Thanks,

Mark

Mark Durno

Homeland Security Advisor / Deputy Chief

Emergency Response Branch
U.S. Environmental Protection Agency
25063 Center Ridge Road
Westlake, OH 44145

440-250-1743

From: Scott Smith [mailto:ssmith@waterdefense.org]
Sent: Wednesday, March 23, 2016 12:08 PM
To: Lam, Shelly
Cc: Durno, Mark
Subject: Water Defense Summary Testing & Lab Reports - Re: Health complaint sampling results

Shelly,

Please see attached Water Defense testing summaries with the detailed lab reports containing the results from Water Defense grab samples and Water Defense WaterBug samples.. Is it possible to get the detailed lab reports from the EPA (like ours) and not just summaries at some point?

Also, note that the WaterBug is based on an open-cell matrix which is designed to mimic the way humans encounter and are exposed to water. The lab tests open-cell matrix blanks with every test.

As we discussed the WaterBug (cumulative exposure testing) is designed to supplement grab sample testing to help understand what is in the water (or may be missed by grab sampling) for more than a few seconds / exposure over time to chemicals in the water. Also, we find using these methods side by side helpful as water is rarely in a closed

loop system / steady state / equilibrium – especially with contamination.

From my research to date (62 water contamination events including Flint), I have found that water testing is more thorough and accurate when grab samples are used in conjunction with the WaterBug to better understand the complete spectrum of what is really in the water from metals in solution to the full spectrum of VOC's and SVOC's. By using the two methods side by side, we better understand what chemicals are in the water and lower the probability of a non-detect when the chemical of concern is actually present in the water.

The following is from ALS Labs: "The Internal standard is low due to the absorption properties of the Open-Cell Matrix which comprises the WaterBug. Meaning, we spike the internal standard on the Open-Cell Matrix and don't get as much out because the Open-Cell Matrix retains a portion of what we spiked." - said differently the concentrations reflected in the WaterBug are most likely higher than what we are reporting. We understand that the cumulative / exposure over time needs to be further clarified / developed to better understand the correlation to the way humans are exposed over time (in a bath or shower) specific to certain chemcials of concern.

Thanks and I will call you today or tomorrow to follow up.

Best Regards,

Scott Smith

Chief Technology Officer & Investigator

Water Defense

Twitter @WaterWarriorOne

(508) 345-6520

From: Shelly Lam <lam.shelly@epa.gov>
Date: Monday, March 21, 2016 at 9:25 AM
To: Scott Smith <ssmith@waterdefense.org>
Cc: Mark Durno <durno.mark@epa.gov>, Shelly Lam <lam.shelly@epa.gov>
Subject: RE: Health complaint sampling results

Scott,

As you requested during our meeting yesterday, I am forwarding you trihalomethane results from samples collected by EPA and the City of Flint. We look forward to receiving your results. Please share when you have the opportunity.

Regards,

Shelly

Shelly Lam, LPG

Federal On-Scene Coordinator

U.S. Environmental Protection Agency

2525 N. Shadeland Avenue, Suite 100

Indianapolis, IN 46219

Office: 317-308-3073

Cell: 317-417-0980

From: Scott Smith [mailto:ssmith@waterdefense.org]
Sent: Saturday, March 19, 2016 4:57 PM
To: Lam, Shelly <lam.shelly@epa.gov>
Cc: Durno, Mark <durno.mark@epa.gov>
Subject: Re: Health complaint sampling results

Shelly,

Thanks for this data. I am also interested in obtaining TOC, VOC, SVOC data along with tentatively identified compound data frequently showing up on chromatograms.

Is this testing data available?

Best Regards,

Scott C. Smith (508-345-6520)

Chief Technology Officer & Investigator

ssmith@waterdefense.org

Twitter: @WaterWarriorOne

On Mar 19, 2016, at 2:50 PM, Lam, Shelly <lam.shelly@epa.gov> wrote:

> Hi Scott,
>
> It was nice to meet you earlier and find out more about the sampling Water Defense is doing in Flint.
>
> As you requested, I am sending you analytical results from our health complaint sampling investigation. I have removed personally identifiable information such as addresses. Some of the data are preliminary. As such, we ask that you do not share it outside of your organization.
>
> If you have any questions about the data, please let me know. I look forward to hearing more about the work Water Defense is doing.
>
> Shelly Lam, LPG
>
> Federal On-Scene Coordinator
>
> U.S. Environmental Protection Agency

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