Message

From: Paul J. Ponturo [PPonturo@H2M.com]
Sent: 12/11/2014 3:30:28 PM
To: Stan Carey [scarey@massapequawater.com]; 'Harrington, Jim (DEC)' [jim.harrington@dec.ny.gov]; 'Scharf, Steven (DEC)' [steven.scharf@dec.ny.gov]
CC: 'Swartwout, John (DEC)' [john.swartwout@dec.ny.gov]; 'Karpinski, Steven (HEALTH)' [steven.karpinski@health.ny.gov]; 'DeFranco, Joseph (NASSAU)' [jdefranco@nassaucountyny.gov]; 'Wilkie, Henry (DEC)' [henry.wilkie@dec.ny.gov]; 'Evans, Daniel (DEC)' [daniel.evans@dec.ny.gov]; Paul J. Granger [pgranger@H2M.com]; Garbarini, Doug [Garbarini.Doug@epa.gov]; Scully, Peter A (DEC) [peter.scully@dec.ny.gov]; Rich Humann [rhumann@h2m.com]; Mike Boufis [mboufis@bethpagewater.com]; Fly, Lora B CIV NAVFAC MIDLANT, IPTNE [lora.fly@navy.mil]; Hannon, ED (AS) [Edward.Hannon@ngc.com]
Subject: RE: Dioxane Concerns
Attachments: removed.txt

Let me step into this discussion.

Under Part 5 of the NYSSC the 50 ppb UOC MCL is enforceable, and has been cited as the basis for removal of public water supply wells from service. If a public water suppliers were to choose not to shut the source down voluntarily, they would be directed to do so under this citation. I would not term the UOC as "guidance" under any circumstances; this is also of importance regarding public perception issues raised by Stan.

The 50 ppb UOC citation was used in the cases of MTBE in 1991, when SCDHS and SCWA encountered it; and in the case of the herbicide dacthal metabolite DCPA.

In the case of MTBE, these findings dramatically altered the response posture of the NYSDEC Spills Unit; and in the case of dacthal led to use withdrawal/ relabeling with respect to Long Island. Also note that MTBE is also listed on the 1998-togs Table 3 cited by Steve Scharf , excerpted in his 12/5/14 e-mail below.

The applicability of the UOC definition was confirmed to me by Lloyd Wilson of NYSDOH after consultation with Tom Johnson of the NYSDOH Bureau of Toxic Substances Assessment in 2007. At that point SCWA had been voluntarily looking for and finding 1,4-dioxane as early as 2003; my inquiry to NYSDOH was predicated on the fact that some results had been approaching 5 ppb, and I wanted a definitive statement from DOH on the applicability of the UOC Maximum Contaminant Level definition in Part 5 NYSSC.

Most recently, the use of the word "standard" was used in a correction to the following Table from the Water Research Foundation: ***1,4 Dioxane White Paper, 2014*** noting state-level drinking water standards and remediation values. The correction was brought to my attention by Min-Suk Kim at the NYSDOH Bureau of Public Water Supply Protection in a message to me dated 5/19/2014.

Stan, as we have discussed UCMR3 monitoring detections of 1,,4-dioxane have been significant. Nationally detection has impacted 20% of public suppliers nationally, 7% of suppliers found to exceed the 0.35 ppb Health Reference Level corresponding to 1 in one-million cancer risk. On Long Island 72% of suppliers have reported 1,4-dioxane at this HRL at some entry point. As of the date of this (October 2014) dataset, the highest concentration in the nation at 33 ppb has been experienced by a Long Island supplier. As you note the Best Available designated treatment technologies to solvents (PTA and GAC) are essentially ineffective, confirming groundwater remediation activities elsewhere in the country well over a decade and a half ago.

State	Guideline	Concentration (ug/L)
California	Notification Level	1
Colorado	Drinking Water Standard	3.2
Connecticut	Comparison Value for Risk Assessments	20
Maine	Maximum Exposure Guideline	32
Massachusetts	Guideline	3
New Hampshire	Proposed Risk-Based Remediation Value	3
New York Dept. of Health	Drinking Water Standard	50
South Carolina	Drinking Water Health Advisory	70

Source: Mohr (2010)

From: Stan Carey [mailto:scarey@massapequawater.com]
Sent: Thursday, December 11, 2014 8:57 AM
To: 'Harrington, Jim (DEC)'; 'Scharf, Steven (DEC)'
Cc: 'Swartwout, John (DEC)'; 'Karpinski, Steven (HEALTH)'; 'DeFranco, Joseph (NASSAU)'; 'Wilkie, Henry (DEC)'; 'Evans, Daniel (DEC)'; Paul J. Granger; Paul J. Ponturo; Garbarini, Doug; Scully, Peter A (DEC); Rich Humann; Mike Boufis; Fly, Lora B CIV NAVFAC MIDLANT, IPTNE; Hannon, ED (AS)
Subject: Dioxane Concerns

Jim,
Thank you for the response. The presence of 1,4 Dioxane related to the Bethpage plume remains a serious concern for water districts. I believe the potential associated costs with respect to treatment significantly changes the cost estimates for the alternatives listed in the ROD for OU2. Beyond that, you witnessed firsthand at the RAB meeting the difficulties in dealing with the public when trying to explain the water is safe to drink.

I understand that this constituent in unregulated and the 50 ug/l is for guidance at this point. However how do we answer the public in a few years when it is regulated and they realize they have been ingesting it? I just want to be proactive and be sure it is on everyone's radar. Perhaps we can discuss this further at next week's meeting? Thanks again.

Stan Carey, Superintendent
Massapequa Water District

From: Harrington, Jim (DEC) [mailto:jim.harrington@dec.ny.gov]
Sent: Wednesday, December 10, 2014 5:34 PM
To: Stan Carey; Scharf, Steven (DEC)
Cc: Swartwout, John (DEC); Karpinski, Steven (HEALTH); DeFranco, Joseph (NASSAU); Wilkie, Henry (DEC); Evans,

Daniel (DEC); pgranger@h2m.com; Paul J. Ponturo
Subject: RE: Northrop Grumman OU 2 - Third Quarter 2014 Groundwater Monitoring Report

Stan – While Joe DeFranco did find a Record of Decision (ROD) that mentions 1,4 dioxane (Cornell University Radiation Disposal Site – 755001 – March 2002). The ROD notice that Joe transmitted characterizes the 50 ug/l value as the cleanup goal for the site. The actual ROD refers to it as a guidance value and that is not completely accurate. The 50 ug/l value comes from the Part 5 drinking water standards for unspecified organic compounds. While there is no regulatory linkage in the Part 703 groundwater standards to the drinking water standards, we have used drinking water standards for comparison before when there is no groundwater standard. At the Cornell site, the levels in the groundwater were as high as 12,000 ug/l (ppb) so the comparative value is pretty much academic anyway.

DEC's Division of Water plans on proposing a standard for 1,4 dioxane early next year and I expect that it will be consistent with the values mentioned in your earlier emails. However, at the current time, there is no numerical standard or guidance value for 1,4 dioxane. Jim H

James B Harrington, PE
Director, Remedial Bureau A
Division of Environmental Remediation
518 -402-9624

Please note my new email address
Jim.Harrington@dec.ny.gov

From: Stan Carey [mailto:scarey@massapequawater.com]
Sent: *Monday, December 08, 2014 12:03 PM*
To: Scharf, Steven (DEC)
Cc: Harrington, Jim (DEC); Swartwout, John (DEC); Karpinski, Steven (HEALTH); DeFranco, Joseph (NASSAU); Wilkie, Henry (DEC); Evans, Daniel (DEC); pgranger@h2m.com; Paul J. Ponturo
Subject: RE: Northrop Grumman OU 2 - Third Quarter 2014 Groundwater Monitoring Report

Steve,
I am a bit confused with your statement "there are no standards for 1,4 dioxane". You are referencing a very old document. Please see the email I received from Mr. DeFranco NC DOH last week which advices the MCL is 50 ug/l. Thank you.

Mr. Carey,

I wanted to get back to you and let you know that I have been in communication with State Health regarding your Nov 17 request. Unfortunately, Mr. Karpinski has not heard back from their Water Supply Bureau and I'm not sure what response we'll be able to give you as of this moment, especially regarding the 1,4 dioxane detections. As you probably know, 1,4 dioxane is a UOC with an MCL of 50 ug/l. It is also a UCMR analyte that EPA will ultimately make a decision as to whether it will be given a specific MCL based on the current UCMR sampling program and its frequency of detection which I believe will continue through 2015.

We remain especially concerned about the lateness of the notification by the Navy on their VPB sampling results and theirs and Northrop/Grumman's slow pace of action to plan for remedial action on this newly discovered hot spot of groundwater contamination near the GM-75 area. I believe EPA has also taken a more aggressive posture regarding this recent discovery and is threatening to implement legal measures accordingly.

It is also my understanding that developments are in the process of unfolding with DEC, EPA, the Navy and Northrop/Grumman regarding this newly released information by the Navy. Once I hear back from NYSDOH, I expect that we will be contacting you shortly thereafter on your request.

Thank you,

Joseph DeFranco, Director
Bureau of Environmental Protection
200 County Seat Drive
Mineola, NY 11501
516 227-9647

Stan Carey, Superintendent
Massapequa Water District

From: Scharf, Steven (DEC) [mailto:steven.scharf@dec.ny.gov]
Sent: Friday, December 05, 2014 1:31 PM
To: Stan Carey
Cc: Harrington, Jim (DEC); Swartwout, John (DEC); Karpinski, Steven (HEALTH); DeFranco, Joseph (NASSAU); Wilkie, Henry (DEC); Evans, Daniel (DEC)
Subject: Northrop Grumman OU 2 - Third Quarter 2014 Groundwater Monitoring Report

Stan,

This e-mail replies to your 12-03-2014 inquiry regarding the Northrop Grumman and Naval Weapons Industrial Reserve Plant (NWIRP) Site. The question the Massapequa Water District raised was whether The Navy and Grumman sample for 1, 4 Dioxane. The Navy samples for 1, 4 Dioxane in routine groundwater monitoring but does not sample the vertical profile borings for this compound due to the potential for interference from sample turbidity. Grumman does not analyze samples for 1,4 Dioxane.

Currently, there are no standards for groundwater for 1, 4 Dioxane. Please see the table below for more detail. Please contact me direct if you have any questions.

Thanks,

Steve

Steven M. Scharf, P.E.
Project Engineer
New York State Dept of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau A
625 Broadway 12th Floor
Albany, NY 12233-7015
518-402-9620

TABLE 3 (Continued)

PARTIAL LIST OF SUBSTANCES NOT REGULATED BY THE PRINCIPAL ORGANIC CONTAMINANT (POC) GROUNDWATER STANDARD

JUNE 1998

Note: Refer to Text of Part I for Explanation

(No standard or guidance value for groundwater is available for these substances as of the date of this document)

SUBSTANCE	CAS NO.
Dimethylphenylcarbinol	617-94-7
Dimethylterephthalate	120-61-6
1,4-Dioxane	123-91-1
Dodecanoic acid	143-07-7
Endosulfan I	959-98-8
Endosulfan II	33213-65-9
Endosulfan sulfate	1031-07-8
Epichlorohydrin	106-89-8
Ethion	563-12-2
2-Ethoxyethanol	110-80-5
2-Ethoxyethanol acetate	111-15-9
Ethyl acetate	141-78-6
Ethyl acrylate	140-88-5
Ethyl di-n-propylthiocarbamate (EPTC)	759-96-4
Ethylene cyanohydrin	109-78-4
Ethyl ether	60-29-7
Ethyl methacrylate	97-63-2
Ethyl methane sulfonate	62-50-0
Famphur	52-85-7
Formaldehyde	50-00-0
Formic acid	64-18-6

Furan	110-00-9

From: Stan Carey [mailto:scarey@massapequawater.com]
Sent: Wednesday, December 03, 2014 1:58 PM
To: Scharf, Steven (DEC); Harrington, Jim (DEC)
Cc: pgranger@h2m.com
Subject: FW: Northrop Grumman Operable Unit 2 - Third Quarter 2014 Groundwater Monitoring Report

Steve, Jim:
Is Grumman and the Navy required to sample for 1,4 Dioxane?

Stan Carey, Superintendent
Massapequa Water District

From: Stern, David [mailto:David.Stern@arcadis-us.com]
Sent: Wednesday, December 03, 2014 12:50 PM
To: Steven Scharf (steven.scharf@dec.ny.gov)
Cc: 'Edward Hannon (Edward.Hannon@ngc.com)'; Fred Weber (E-Mail); Walter Parish; ' (whspitz@gw.dec.state.ny.us)'; ' ('sxk23@health.state.ny.us')'; ' (michael.alarcon@hhsnassaucountyny.us)'; ' (joseph.defranco@hhsnassaucountyny.us)'; ' (lora.fly@navy.mil)'; ' (david.brayack@ttnus.com)'; Roger_Smith@oxy.com; 'Kevin Lumpe (E-Mail)'; ' (taccone.tom@epa.gov)'; 'Matt Russo'; Stan Carey; ' (msnyder@aquaamerica.com)'; Charlie@SFWater.com; ' (mikebwd@optonline.net)'; ' (sabinolaw@optonline.net)'; Robert Alvey; San Giovanni, Carlo; Wolfert, Mike; Zahradnik, Art
Subject: Northrop Grumman Operable Unit 2 - Third Quarter 2014 Groundwater Monitoring Report

Steve:

On behalf of Northrop Grumman, please find attached the Third Quarter 2014 Groundwater Monitoring Report for Operable Unit 2. Those individuals not copied on this electronic transmission will receive a copy of the report via regular mail. Please contact us if you have questions or comments.

Thanks.

David E. Stern | Senior Hydrogeologist / Certified Project Manager | david.stern@arcadis-us.com

ARCADIS U.S., Inc. | Two Huntington Quadrangle, Suite 1S10 | Melville, New York 11747
T: 631.391.5284 | M: 516.369.7440 | F: 631.249.7610
Connect with us! www.arcadis-us.com | LinkedIn | Twitter | Facebook

Professional Affiliate / ARCADIS of New York, Inc.
Professional Registration LEP-CT #440

ARCADIS, Imagine the result

Please consider the environment before printing this email.

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2015.0.5577 / Virus Database: 4235/8673 - Release Date: 12/03/14

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2015.0.5577 / Virus Database: 4235/8685 - Release Date: 12/05/14

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2015.0.5577 / Virus Database: 4235/8686 - Release Date: 12/05/14

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2015.0.5577 / Virus Database: 4235/8716 - Release Date: 12/11/14

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2015.0.5577 / Virus Database: 4235/8716 - Release Date: 12/11/14

CONFIDENTIALITY NOTICE: Thanking you in advance for your cooperation, the information contained in this message and any attachments is intended only for the use of the individual(s) named above. If the person actually receiving this email is not the named or intended recipient, any use, dissemination, distribution, or copying of this communication is prohibited. If you have received this communication in error, please immediately notify us by email that this message has been inadvertently transmitted to you and kindly delete this e-mail from your system. We appreciate your time and attention.