

**From:** [Moody, Rick](#)  
**To:** [Burdick, William](#)  
**Subject:** RE: 1, 4 Dioxane  
**Date:** Friday, November 21, 2014 8:34:48 AM

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Bill,

Thanks. Great information and advice. Appreciate your help.

Rick Moody  
P&G Site Environmental Leader

Ph: 336-954-4967  
Fax: 336-954-4561  
email: moody.rb@pg.com

*"And let us not be weary in well doing: for in due season we shall reap, if we faint not."  
Galatians 6:9*

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**From:** Burdick, William [mailto:William.Burdick@greensboro-nc.gov]  
**Sent:** Friday, November 21, 2014 8:30 AM  
**To:** Moody, Rick  
**Cc:** Skee, Joseph  
**Subject:** RE: 1, 4 Dioxane

Hi Rick,

If you sample from the designated sampling point described in your permit you are required to report it and I would have to put in your database and file (whether the parameter is on your permit or not). However if you are able to remove the sample hose ( if there is slack in the hose or just add an extension to the hose) and move it upstream from the designated sample location, just one or two feet, you could use the same composite sampler and you would not be required to report it.

Chris at Meritech said that your sample could be taken as either a composite or grab in a 500ml – 1000ml glass amber bottle, iced. A composite is the preferred ‘window’ for assessing the big picture from a industrial process waste stream. 1, 4 Dioxane is not easily treated nor will it volatilize easily -- therefore will not need any preservative – the method has a 14 day holding time.

Let me know if you have any other questions.

Regards,

Bill Burdick

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**From:** Moody, Rick [mailto:moody.rb@pg.com]  
**Sent:** Friday, November 21, 2014 8:07 AM  
**To:** Burdick, William

**Subject:** RE: 1, 4 Dioxane

Bill,

Thanks for your help. One last question, If I sample for 1, 4 Dioxane, and I sample from my composite sampler that is on the permit, and I use Meritech as the lab, am I required to report. I did not think I did because that is not one of the constituents listed on my permit, however Drew said that he thought he heard someone in the meeting yesterday say that we needed to sample upstream from our permitted sample point.

Thanks

Rick Moody  
P&G Site Environmental Leader

Ph: 336-954-4967

Fax: 336-954-4561

email: [moody.rb@pg.com](mailto:moody.rb@pg.com)

*"And let us not be weary in well doing: for in due season we shall reap, if we faint not."*

*Galatians 6:9*

---

**From:** Burdick, William [<mailto:William.Burdick@greensboro-nc.gov>]

**Sent:** Thursday, November 20, 2014 3:12 PM

**To:** Moody, Rick

**Cc:** Skee, Joseph

**Subject:** RE: 1, 4 Dioxane

Rick,

That is where we are starting. If for some reason we get results that are all less than detect (5.0 ppb) than we will look into using the 522 method.

Regards,

Bill Burdick

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**From:** Moody, Rick [<mailto:moody.rb@pg.com>]

**Sent:** Thursday, November 20, 2014 3:06 PM

**To:** Burdick, William

**Subject:** RE: 1, 4 Dioxane

Bill,

Bill,

Good to see you and the team as well. So, just to clarify, if I use Meritech and ask them to use

# City of Reidsville

## Public Works Department



LIVE SIMPLY. THINK BIG.

Date: 19 October 2015  
To: Preston Mitchell  
From: Kevin Eason, PE  
Re: Concerns Regarding Recent Reporting of 1,4 Dioxane

### Background

Over the past year there has been some discussion among various stakeholders regarding the presence of a chemical known as 1,4 dioxane in the Cape Fear river and tributaries thereof.

This particular chemical is a common organic chemical, one of many which are found in trace quantities in both ground and surface waters throughout the country. Some uses and sources of dioxane are:

- An industrial solvent stabilizer
- A constituent of paint strippers, varnishes, soaps, make-up, antifreeze, etc.
- A trace ingredient in over 10,000 consumer personal care products.
- A by-product of process used to make/recycle polyethylene terephthalate (PET) plastic and polyester products

Dioxane is also listed by the EPA as one of many “probable human carcinogens”, which simply means chemicals where evidence based on “limited” studies and evidence of carcinogenicity based on animal studies is considered “sufficient”.

Lately it has become a subject of scrutiny, due to concerns raised by the City of Fayetteville in response to independent research conducted by NCSU in regards to new techniques to remove such contaminants from water sources. Specifically;

- The NC-DWR was alerted of potential contamination in Cape Fear River in March 2014 by NCSU Professor Dr. Detlef Knappe, doing research on the EPA’s Unregulated Contaminant Monitoring Rule (UCMR3) data.
- A series of articles appeared in the Fayetteville Observer in February 2015, speculating as to the source of the contaminate to be originating from the upper portion of the Haw River.
- Selected Haw River cities met with State, Fayetteville officials, and Dr. Knappe in early March to discuss.
- Affected cities agreed (internally) to perform some self-monitoring at their respective WWTP.

- The City of Reidsville POTW conducted composite sampling for dioxane at the influent side of the sand filter prior to chlorination.
- As expected Reidsville, as well as other Triad cities, found dioxane in the wastewater. This caused no extraordinary concern due to the fact that the chemical is currently unregulated and that wastewater plants are unable to remove the chemical from the process flow in absence of expensive advanced process equipment.

On September 28<sup>th</sup>, 2015, Carrie Ruhlman of NCDEQ – Division of Water Resources presented “**A Cooperative Study on 1,4-Dioxane**” at statewide pretreatment conference in Asheville, summarizing the results of her office and Dr. Knappe’s research over the past year. After listening to her presentation, I believe Reidsville, Triad cities and other cities throughout the State have specific causes for concern regarding the unusual interest and resources the State is expending on the subject. These areas of concern are 1) **Undermining trust in the public water supply** 2) **Threat of post haste attempt at regulation by the State on wastewater treatment plants.**

“**Source of cancer-risk toxin in Cape Fear River investigated**”, “**Officials Study Cancerous Chemical Found in Haw, Cape Fear Rivers**” and “**‘Likely’ Cancer Cause Found in Fayetteville’s Drinking Water**” are but three articles printed earlier in the year in the Fayetteville area. Although we have no control over the headlines, text of the articles is concerning for several reasons:

- The articles imply that the source of the chemical contaminate in Fayetteville is the cities of the upper Haw River basin, namely Asheboro, Greensboro and Reidsville. The articles also can be construed as giving credence that dioxane is finding its way into the water supply via some nefarious “industry sending wastewater” to the City’s wastewater facilities.
  - 1,4 dioxane is a legitimate product that is indeed used by many industries located everywhere manufacturing occurs. To paint it as originating from the Triad area is patently unfair.
- The actual EPA classification of dioxane is a Group B2 “Probable Human Carcinogen”. The EPA definition is “There is inadequate evidence that it can cause cancer in humans but at present it is far from conclusive”.
  - It appears that the thrust and emphasis on the reporting and research chemical is at odds with the actual risk to the public.

While we respect Dr. Knappe’s research into topics that interest him, it is questionable as to why the State is expending time and money following along.

- The EPA, through its Unregulated Contaminate Monitoring Rule is currently in Phase III monitoring and Phase IV planning stages. Well over a hundred chemicals and other contaminants are periodically evaluated nationwide to determine the risk to the public and the need to regulate. Dioxane is currently being evaluated therefor the State’s pursuit of this particular contaminate is both unwarranted and unhelpful at the present as both WTP and WWTP struggle to meet the regulations already imposed. There is nothing special about dioxane, any more so than the hundreds of other micro-contaminates found in the rivers and lakes of the State.

The threat of an attempt by the State to forward regulate cannot be dismissed. Ms. Ruhlman presented the following options as part of her presentation:

- I. Proactively work with industries generating 1,4-dioxane to reduce/eliminate source(s) prior to regulation
- II. Wait for DWR to regulate
- III. Wait for EPA to regulate

As cities, we have several concerns with this, namely;

- Option I assumes that chemical will in fact be regulated. As this is a legitimate and common industrial chemical, there may or may not be way to eliminate it without shutting down the industries. With industrial and manufacturing beginning to stage a comeback, now is not the time to place obstacles in their way, especially on the weight of tenacious claims of health hazards associated with one particular chemical.
- It's inconceivable that DWR would even consider regulating a chemical on the evidence of one basin and a chemical that, so far, the Federal government has shown no inclination to regulate. In addition:
  - The FDA does not currently regulate the production of cosmetics and personal care products. Altogether over 10,000, or about 46%, of consumer products contain dioxane or its derivatives.
  - To remove the product from water an advanced treatment process utilizing oxidizers and UV light treatment is needed. It is expected it would costs several hundred thousands of dollars to install and operate such equipment on a plant the size of Reidsville's.
- It is certainly possible that following the EPA's completion of the UCMR-3 testing that they will choose to regulate in some fashion. While it would be regrettable due to the expense to comply, at least on the Federal level the playing field would remain level and not give industry cause to relocate to another state due to differences in permit limits.

One issue involving dioxane is peculiar to Reidsville. Due to the location of an unused water intake on the City's receiving stream (Haw River), the inswstream water quality standards are much more restrictive for the portion of the stream in Rockingham County (0.35 µg/l) than it is for Guilford County (80 µg/l).

As you meet with State officials, there are some specific requests to consider:

1. Request to leave the evaluation of new contaminates to the EPA's UCMR program. There are many other items of importance that needs the State's attention such as the existing pollutants already being regulated and the resolution of the proposed metals standards for streams in NC.
2. Understanding that for small cities, budget dollars are not available for "research" and that by not participating in their dioxane efforts, or willingness to call out industrial dischargers who are doing nothing wrong, is a valid response.
3. Cautioning the academic researchers that handling issues as the way this dioxane study has been handled causes unnecessary public anxiety and loss of confidence in their water supply.

4. Consider reclassifying the upper Haw back to non-water supply. The GSO intake is not currently used and never will be, except in dire emergencies. Meanwhile the classification has a daily negative impact on Reidsville's ability to discharge.

**From:** Reeder, Tom [<mailto:tom.reeder@ncdenr.gov>]  
**Sent:** Tuesday, November 03, 2015 8:57 AM  
**To:** Jeff Warren (President Pro Tem's Office)  
**Cc:** Dockham, Matthew T; Knott, Brad; Vandervaart, Donald; Evans, John  
**Subject:** RE: 1, 4 Dioxane

Jeff – Please let your contacts know that I am taking care of this. I am setting up a meeting with appropriate staff. I don't envision that anyone else will be receiving provisions regarding 1,4 dioxane in their permits unless mandated by requirements initiated by EPA. I will also look into whether we can extract it from Greensboro's permit. Please don't misunderstand my intentions. I am all for protecting our critical drinking water supplies in North Carolina. However, I don't feel that we (NC) need to get out ahead of the federal government, who is also looking into this and has much more extensive resources to properly investigate. I would prefer to defer to federal guidance on this matter, rather than try to make it up as we go. Thanks.

Tom Reeder

Assistant Secretary for Environment  
NC Department of Environmental Quality  
Office: 919-707-8619  
Cell: 919-630-9241

[tom.reeder@ncdenr.gov](mailto:tom.reeder@ncdenr.gov)

1601 Mail Service Center  
Raleigh NC 27699-1601



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**From:** Jeff Warren (President Pro Tem's Office) [<mailto:Jeff.Warren@ncleg.net>]  
**Sent:** Monday, November 02, 2015 2:48 PM  
**To:** Reeder, Tom <[tom.reeder@ncdenr.gov](mailto:tom.reeder@ncdenr.gov)>  
**Subject:** FW: 1, 4 Dioxane

Fair question below to you, Tom.

--

Jeffrey D. Warren, PhD  
Science and Energy Advisor  
Office of the President Pro Tempore  
North Carolina Senate  
Legislative Building room 1408B  
(919) 301-2008

---

**From:** Kevin Eason [<mailto:keason@ci.reidsville.nc.us>]  
**Sent:** Monday, November 02, 2015 2:48 PM  
**To:** Jeff Warren (President Pro Tem's Office)  
**Cc:** Preston Mitchell; Jay Donecker  
**Subject:** Re: 1, 4 Dioxane

Jeff:

Please ask Mr. Reeder how they forced Greensboro to accept a 1,4 Dioxane reopener clause in their recently received WWTP discharge permit.

Thanks

Kevin Eason

**Kevin Eason, PE**  
(336) 312-4019

"Jeff Warren (President Pro Tem's Office)" <[Jeff.Warren@ncleg.net](mailto:Jeff.Warren@ncleg.net)> wrote:

Kevin, Preston, and Jay,

I just got off the phone with Tom Reeder (Asst Secretary at DEQ - he used to be in DWR before his promotion overseeing all environmental divisions within the DEQ) and he stated that there is no movement afoot to regulate 1, 4-Dioxane. If there was, it would need to be approved by the Environmental Mgmt Commission (DEQ's rulemaking body) and that would be an 18-month rulemaking process at best (if not 24-36 months). This effort apparently is related with trying to address concerns from Fayetteville's water system after they found 1, 4-Dioxane in their supply (and trying to figure out where it might be coming from). So, for now, I believe there is just a bit of confusion about what DEQ is doing with these data (and Tom said he would work internally to better convey the message that this is not a rulemaking initiative). I will continue to monitor this policy issue and, if anything changes, I will let you know.

-jeff

--

Jeffrey D. Warren, PhD  
Science and Energy Advisor  
Office of the President Pro Tempore  
North Carolina Senate  
Legislative Building room 1408B  
(919) 301-2008

-----Original Message-----

From: Kevin Eason [<mailto:keason@ci.reidsville.nc.us>]  
Sent: Monday, November 02, 2015 12:09 PM  
To: Jeff Warren (President Pro Tem's Office); Preston Mitchell  
Cc: Jay Donecker  
Subject: RE: 1, 4 Dioxane

Mr. Warren

Attached is the presentation by Carrie Ruhlman in Asheville on 9/28 as well as the meeting handouts we received at the meeting at the WWTP in Greensboro on 10/28.

Thanks

Kevin Eason

-----Original Message-----

From: Jeff Warren (President Pro Tem's Office) [<mailto:Jeff.Warren@ncleg.net>]  
Sent: Monday, November 02, 2015 10:43 AM  
To: Preston Mitchell  
Cc: Jay Donecker; Kevin Eason



Subject: Re: 1, 4 Dioxane

Do you all have any correspondence from DEQ (DENR) regarding this compound?

---

Jeffrey D. Warren, PhD  
Office of the President Pro Tempore  
North Carolina Senate

On Nov 2, 2015, at 9:44 AM, Preston Mitchell <[pmitchell@ci.reidsville.nc.us](mailto:pmitchell@ci.reidsville.nc.us)>> wrote:

[Dr. Warren,](#)

[Please see the attached memos Reidsville Public Works Director Kevin Eason has prepared. I have carbon copied Kevin, along with Mayor Jay Donecker, to allow you to contact him directly with any follow up questions as he and his staff are much more skilled in this issues through their positions than I in mine. However, I would request you to give me a call after your review and any discussion for what you would like use to inform our industries we will now have to sample as I am sure they will be contacting various officials in the State Government, including Senator Berger's office.](#)

[Thanks,](#)

[Preston Mitchell](#)  
[City Manager](#)  
[City of Reidsville](#)  
[336-349-1030](#)  
[pmitchell@ci.reidsville.nc.us](mailto:pmitchell@ci.reidsville.nc.us)  
[www.ci.reidsville.nc.us/](http://www.ci.reidsville.nc.us/)>

**From:** [Groome, Martie](#)  
**To:** [Goots, Alicia](#)  
**Subject:** FW: 1, 4 Dioxane (Greensboro and Reidsville)  
**Date:** Tuesday, February 9, 2016 10:11:00 AM  
**Attachments:** [image001.png](#)

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## *Martie Groome*

Laboratory and Industrial Waste Section Supervisor  
City of Greensboro Water Resources Department  
Box 3136, Greensboro NC 27402-3136  
Phone: 336-433-7229 Fax: 336-373-7720  
[www.greensboro-nc.gov](http://www.greensboro-nc.gov)

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**From:** Steve Tedder [<mailto:tedderfarmconsulting@gmail.com>]  
**Sent:** Monday, February 08, 2016 4:02 PM  
**To:** Groome, Martie  
**Subject:** RE: 1, 4 Dioxane (Greensboro and Reidsville)

Martie

Interesting to see Reeder's comment on **Nov 3, 2015**, that he would take care of the situation. And then see a "NEW" report on the Water Sciences website that was released **January 25<sup>th</sup> of 2016**.  
[http://portal.ncdenr.org/c/document\\_library/get\\_file?uuid=62978187-2f1e-4919-b66a-db496c693995&groupId=38364](http://portal.ncdenr.org/c/document_library/get_file?uuid=62978187-2f1e-4919-b66a-db496c693995&groupId=38364)

Maybe DWR did not get the memo. Or maybe Reeder spoke what he thought Jeff Warren wanted to hear.

Thanks for you and Alicia updating me this morning!

Tedder

---

**From:** Groome, Martie [<mailto:Martie.Groome@greensboro-nc.gov>]  
**Sent:** Monday, February 08, 2016 11:32 AM  
**To:** Steve Tedder  
**Cc:** Goots, Alicia  
**Subject:** FW: 1, 4 Dioxane (Greensboro and Reidsville)

FYEO

m

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**From:** Kevin Eason [<mailto:keason@ci.reidsville.nc.us>]  
**Sent:** Tuesday, November 03, 2015 12:34 PM  
**To:** Drew, Steve; Groome, Martie; Williams, Elijah; Ralph Potter; Michael Burluson; Mitzy Fain  
**Subject:** FW: 1, 4 Dioxane (Greensboro and Reidsville)  
Making sure everyone has a copy, please let Michael Rhoney in Asheboro know.

---

**From:** Jeff Warren (President Pro Tem's Office) [<mailto:Jeff.Warren@ncleg.net>]

**Sent:** Tuesday, November 03, 2015 9:15 AM

**To:** Kevin Eason; Preston Mitchell; Jay Donecker ([jay.donecker@gmail.com](mailto:jay.donecker@gmail.com))

**Subject:** 1, 4 Dioxane (Greensboro and Reidsville)

Kevin, Preston, and Jay,

See this morning's DENR response to me below (Asst Secretary Reeder has copied the Secretary and the Deputy Secretary on his response to me so it is now elevated to the top echelon @ DEQ). Tom reiterates the statement I made to you all yesterday about there being no movement to regulate 1, 4-Dioxane absent a federal mandate. In addition, you will note that DEQ is reviewing the Greensboro permit provision related to 1, 4-Dioxane (and potentially may remove that provision from G'boro's NPDES permit). You might want to reach out to your counterparts in Greensboro and let them know (and thank you for bringing

the Greensboro issue to my attention as it has the potential to set an improper precedent that could run afoul of a handful of regulatory reform provisions that are now in the General Statutes). I will keep you in the loop as this issue continues to move forward.

-jeff

--

Jeffrey D. Warren, PhD  
Science and Energy Advisor  
Office of the President Pro Tempore  
North Carolina Senate  
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(919) 301-2008

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**From:** Reeder, Tom [<mailto:tom.reeder@ncdenr.gov>]

**Sent:** Tuesday, November 03, 2015 8:57 AM

**To:** Jeff Warren (President Pro Tem's Office)

**Cc:** Dockham, Matthew T; Knott, Brad; Vandervaart, Donald; Evans, John

**Subject:** RE: 1, 4 Dioxane

Jeff – Please let your contacts know that I am taking care of this. I am setting up a meeting with appropriate staff. I don't envision that anyone else will be receiving provisions regarding 1,4 dioxane in their permits unless mandated by requirements initiated by EPA. I will also look into whether we can extract it from Greensboro's permit. Please don't misunderstand my intentions. I am all for protecting our critical drinking water supplies in North Carolina. However, I don't feel that we (NC) need to get out ahead of the federal government, who is also looking into this and has much more extensive resources to properly investigate. I would prefer to defer to federal guidance on this matter, rather than try to make it up as we go. Thanks.

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1601 Mail Service Center  
Raleigh NC 27699-1601



The logo for 'Nothing Compares', featuring a stylized blue mountain range icon to the left of the text 'Nothing Compares' in a blue, sans-serif font.

*Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.*

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**From:** Jeff Warren (President Pro Tem's Office) [<mailto:Jeff.Warren@ncleg.net>]

**Sent:** Monday, November 02, 2015 2:48 PM

**To:** Reeder, Tom <[tom.reeder@ncdenr.gov](mailto:tom.reeder@ncdenr.gov)>

**Subject:** FW: 1, 4 Dioxane

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Science and Energy Advisor

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**Subject:** Re: 1, 4 Dioxane

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Mr. Warren

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Cc: Jay Donecker; Kevin Eason

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Jeffrey D. Warren, PhD  
Office of the President Pro Tempore  
North Carolina Senate

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[Dr. Warren,](#)

[Please see the attached memos Reidsville Public Works Director Kevin Eason has prepared. I have carbon copied Kevin, along with Mayor Jay Donecker, to allow you to contact him directly with any follow up questions as he and his staff are much more skilled in this issues through their positions than I in mine. However, I would request you to give me a call after your review and any discussion for what you would like use to inform our industries we will now have to sample as I am sure they will be contacting various officials in the State Government, including Senator Berger's office.](#)

[Thanks,](#)

[Preston Mitchell](#)  
[City Manager](#)  
[City of Reidsville](#)  
[336-349-1030](#)  
[pmitchell@ci.reidsville.nc.us](mailto:pmitchell@ci.reidsville.nc.us)>  
[www.ci.reidsville.nc.us/](http://www.ci.reidsville.nc.us/)>

**From:** [Steve Tedder](#)  
**To:** [Groome, Martie](#)  
**Subject:** EMC  
**Date:** Saturday, March 11, 2017 12:47:53 PM

---

Hey Martie,

Zimmerman mentioned expanding the Divisions efforts on the 1-4 dioxane issues in his wrap up comments on Thursday.

I would like to see a copy of the letter he references if you have it available.

I was hoping this would die a natural death but guess someone still pushing the issue. I hope this is not expanding in scope due to Reidsville's position on the matter.

Tedder

<https://ncdenr.s3.amazonaws.com/s3fs->

[public/Environmental%20Management%20Commission/EMC%20Meetings/2017/2\\_March2017/Directors\\_Comments\\_09March2017.pdf](https://ncdenr.s3.amazonaws.com/s3fs-public/Environmental%20Management%20Commission/EMC%20Meetings/2017/2_March2017/Directors_Comments_09March2017.pdf)



**From:** [Skee, Joseph](#)  
**To:** [Burdick, William](#); [Groome, Martie](#)  
**Subject:** it works for anything!...  
**Date:** Friday, February 10, 2017 8:52:53 AM

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Scottie Says:

"Let me say to you, science tells us that ~~the climate is changing~~ 1, 4-Dioxane is becoming a problem and that human activity in some matter impacts that change. The ability to measure with precision the degree and extent of that impact, and what to do about it, are subject to continuing debate and dialogue. And well it should be."

**Frank Skee, Pretreatment Coordinator**  
**Department of Water Resources**  
**City of Greensboro**  
**Phone: 336-433-7227 Fax: 336-373-7720**  
**PO Box 3136, Greensboro, NC 27402-3136**  
[www.greensboro-nc.gov](http://www.greensboro-nc.gov)

**From:** [Burdick, William](#)  
**To:** [Kenny Adams](#)  
**Subject:** RE: City of Greensboro Public Information Requests  
**Date:** Tuesday, December 11, 2018 10:11:56 AM  
**Attachments:** [image001.png](#)

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Hi Ken,

The information regarding PIRT requests is public information. As far as we know the players involved in requesting this information are;

1. Roc Smith, professional blogger and independent journalist for small magazines such as YES Weekly and others. A former UNC professor.
2. Emily Sutton, lead environmentalist with Haw River Association
3. Detlef Knappe, engineering professor with NC State behind numerous emerging contaminant (Br, 1,4 Dioxane, GenX) public scares in an effort to gain grant \$ and sell treatment systems.

Regards,



*William P. Burdick*  
*City of Greensboro, Water Resources*  
*Industrial Waste Compliance Specialist*  
2350 Huffine Mill Road  
McLeansville, NC 27301  
336-373-3285

---

**From:** Kenny Adams  
**Sent:** Friday, December 7, 2018 10:48 AM  
**To:** Burdick, William  
**Subject:** RE: City of Greensboro Public Information Requests

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. Report suspicious emails by clicking the “**Phishing Alert**” button.

Bill,  
Is it possible to know who made this request?  
Thanks,  
Kenny  
Kenneth Adams  
Facilities Engineering Manager  
Elastic Fabrics of America

---

**From:** Burdick, William <[William.Burdick@greensboro-nc.gov](mailto:William.Burdick@greensboro-nc.gov)>  
**Sent:** Friday, December 07, 2018 10:02 AM



**From:** [Borchers, Mike](#)  
**To:** [Stewart, Jana](#)  
**Cc:** [Shandor, Marie](#)  
**Subject:** RE: PTRWA Data  
**Date:** Thursday, June 27, 2019 9:30:00 AM  
**Attachments:** [PTRWA 1.4-Dioxane.xlsx](#)  
[TZ Osborne WRF 1.4-Dioxane Reults.xlsx](#)

Jana,  
 Here is the Randleman lake data I mentioned I would send you. Also attached are the effluent sample results for T.Z. Osborne. Please mention to B&V the 1,4-Dioxane results should not be shared outside their organization.  
 Thanks,  
 MMB

**From:** Shandor, Marie  
**Sent:** Wednesday, June 26, 2019 1:33 PM  
**To:** Stewart, Jana  
**Cc:** Borchers, Mike  
**Subject:** RE: PTRWA Data

Jana,  
 Do you know what parameters they're looking for and how far back do they need? We do weekly sampling for general stuff like pH, chlorine residual, etc. \*\* Results are from our interconnect sampling station at the corner of holden and bishop road.

As far as UCMR3 parameters- we do quarterly sampling for a hexavalent Chromium, 1-4 dioxane, chlorate and PFOS/PFOA panel.

LocationCode		Site Type		DBP 1 or 2		X Coord		Y Coord		UCMR3																									
LocationName:		Address		Chromium Hex		Chlorate		1,4-Dioxane		ePosaa		mPosaa		PFBS		PFDA		PFHpA		PFHxS		PFHxA		PFDoA		PFTeDA		PFNA		PFOS		PFOA		PFTeD:	
MDM1		T		DBP 1 or 2		1754153.599		817651.4																											
Sampling stn @ Bishop Rd		PTRWA B09\MDM1																																	
PTRWA sampling stn @ Bishop Rd / Holden Rd E																																			

Marie Shandor, Water Supply Lab Supervisor  
 Water Resources  
 City of Greensboro  
 Phone: 336 373-7649  
 PO Box 3136, Greensboro, NC 27402-3136  
[www.greensboro-nc.gov](http://www.greensboro-nc.gov)

**From:** Stewart, Jana <[Jana.Stewart@greensboro-nc.gov](mailto:Jana.Stewart@greensboro-nc.gov)>  
**Sent:** Wednesday, June 26, 2019 1:14 PM  
**To:** Shandor, Marie <[Marie.Shandor@greensboro-nc.gov](mailto:Marie.Shandor@greensboro-nc.gov)>  
**Cc:** Borchers, Mike <[Michael.Borchers@greensboro-nc.gov](mailto:Michael.Borchers@greensboro-nc.gov)>  
**Subject:** PTRWA Data

Marie,  
 I'm way out of my league when I start to get into testing stuff. BUT, Black and Veatch has requested some additional information on water quality data from PTRWA. Apparently, PTRWA doesn't have any posted UCMR3 data online. Do we have any WQ testing data that we can pass along? Mike had mentioned he thought PTRWA had sent us some data reports for 2018.

Jana C. Stewart, PE, Engineering Supervisor  
 Asset Management and GIS  
 Water Resources  
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 336.279.0867 mobile  
 2602 S. Elm-Eugene Street, Greensboro, NC 27405  
[www.greensboro-nc.gov](http://www.greensboro-nc.gov)

From: [Borchers, Mike](#)  
 To: [Stewart, Jana](#)  
 Subject: RE: PTRWA Data  
 Date: Thursday, June 27, 2019 9:48:21 AM

It's okay buried in the report. Just don't want it to stick out like a sore thumb.  
 Thanks,  
 MMB

From: Stewart, Jana  
 Sent: Thursday, June 27, 2019 9:37 AM  
 To: Borchers, Mike  
 Subject: RE: PTRWA Data

So how does that work in the report? The report will be public record eventually.  
 Jana C. Stewart, PE  
 Engineering Supervisor  
 Water Resources  
 City of Greensboro  
 336.412.6314

From: Borchers, Mike <[Michael.Borchers@greensboro-nc.gov](mailto:Michael.Borchers@greensboro-nc.gov)>  
 Sent: Thursday, June 27, 2019 9:31 AM  
 To: Stewart, Jana <[Jana.Stewart@greensboro-nc.gov](mailto:Jana.Stewart@greensboro-nc.gov)>  
 Cc: Shandor, Marie <[Marie.Shandor@greensboro-nc.gov](mailto:Marie.Shandor@greensboro-nc.gov)>  
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Location Code: <b>MDM1</b> Site Type: <b>T</b> <b>DBP 1 or 2</b>										Location Name: <b>Sampling stn @ Bishop Rd PTRWA B09MDM1</b> X Coord: <b>1754153.599</b>										Address: <b>PTRWA sampling stn @ Bishop Rd / Holden Rd. F</b> Y Coord: <b>817651.4</b>									
										UCMR3																			
THM	HAA5	Total CL2	Mono chlora amines	Free NH3-N	PH	Temp C	THM Proc Ctl	Pub Not	Spec Non Comp	Chromium Hex	Chlorate	1,4-Dioxane	ePosas	mPosas	PFBS	PFDA	PTHpA	PTHsS	PTHsA	PFDoA	PFTeDA	PFNA	PFOS	PFOA	PFTeD:				
35.0	14.0	2.73	2.64	0.00	8.27	20.9	45.0			.03	54	.31			2.7	<2.0	3.0	4.7	6.6			<2.0	13.0	4.9					
22.0	15.0	2.95	2.84	0.00	8.39	10.2	24.0				340	.39			2.7	<2.0	3.2	3.6	7.4			<2.0	8.8	4.5					

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