



Clean Haw River

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Frequently Asked Questions

1. Where does the city of Pittsboro obtain its drinking water?

Residents within the city of Pittsboro obtain drinking water from the Haw River. We are the only municipality that draws its water directly from this river. The Haw River is a North Carolina river that flows from Greensboro southeastward and empties into the Cape Fear River, south of Pittsboro. See map below from the Haw River Assembly (PDF version linked [here](#)). For more details about the Haw River itself, check out www.americanrivers.org/river/haw-river/



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2. What are *emerging contaminants*? Which ones are found in Pittsboro's drinking water? (UPDATED 8.10.20)

An **emerging contaminant** is a term used to describe chemicals or microscopic organisms that are not monitored or regulated by environmental agencies, but have the potential to cause harm to the environment and/or human health.

In Pittsboro, there are THREE emerging contaminants currently of concern: PFAS, 1,4 dioxane, and bromide.

PFAS (per- and polyfluoroalkyl substances) are pollutants found in drinking water across the United States, including North Carolina. There are man-made chemicals used as water and grease repellents. These are sometimes called "forever chemicals" because they do not easily break down in the environment or in people. PFAS has been linked to health effects such as increased cholesterol, developmental and reproductive health effects, thyroid disease, pregnancy induced hypertension, and some cancers." (From the [Haw River Assembly](#))

1,4-dioxane is used for many different industrial purposes. It is used in the process of making other chemicals. It is found in small amounts in cosmetics, detergents, and shampoos. 1,4 dioxane does not break down in water. It has been linked to liver and kidney damage, and likely causes cancer. (From the Agency for Toxic Substances and Disease Registry (www.astdr.cdc.gov))

Bromide is an element that occurs naturally at very low concentrations, but is also found in fossil fuels, such as coal, and in pesticides. Levels of bromide have been found in surface waters (including the Haw River), likely due to industrial and agricultural processes. While bromide itself is not linked to serious health concerns, it reacts with disinfectants used during water treatment, leading to dangerous by-products that can contribute to eye and skin irritation, central nervous system problems, liver and kidney damage, and cancer. (From: [EPA](#) and [NC Health News](#)).

3. But, isn't the water cleaned before it reaches our homes?

Yes and no. Pittsboro's drinking water is treated before it reaches homes and businesses, but the specific chemicals that are being detected are incredibly difficult to filter out. In 2017, the city added "activated carbon" to the water treatment process, which helps remove the PFAS chemical, but does nothing for the other chemicals. Since then, no new actions have been taken to remove these chemicals from the city's drinking water.

4. Who discovered this problem and how long have we known about this? (UPDATED 8.10.20)

The contamination was discovered after an investigation by the **Haw River Assembly in 1985**. In the report from that year, the source of the industrial pollutants were identified as coming from cities “upstream”, meaning cities located along the Haw River north of Pittsboro (including Greensboro, Reidsville, and Burlington). The Haw River Assembly has continued to update Pittsboro leaders since then. After a report was published for the scientific community in 2007, the Town of Pittsboro was notified about high levels of unregulated contaminants.

The Mayor of Pittsboro and the Board of Commissioners have been discussing issues related to these emerging contaminants since at least 2015. You can view documentation of meetings and presentations from scientists, government leaders around the state, and state and federal agencies. From June 2015 through July of 2019 on the City of Pittsboro’s [website](#). In August of 2019, the city sent [this letter](#) to its water customers alerting them about the presence of 1,4 Dioxane, bromides, and PFAS.

5. What is the Haw River Assembly?

The guardians of the Haw River. Since 1982 they have led monitoring programs, educational programs and events, and have been a significant advocate for the protection of the Haw River. They are led by Elaine Chiosso and Emily Sutton, who have been working tirelessly to raise awareness about the water quality problem, and many many other issues surrounding the Haw River. You can learn more about the Haw River Assembly at www.hawriver.org.

6. What are the Federal, State, and Local limits for each of these emerging contaminants?

In general, there are no federal health standards for emerging contaminants. By definition, they are unregulated. However, numerous scientific studies suggest strong links to serious health concerns due to exposure to these chemicals. Below is some specific information about the emerging contaminants currently being found in the Haw River. The following information is from the EPA’s health advisory, which are not enforceable by law and not legally regulated. The advisory simply provides information to state agencies and public health officials

- **PFAS** (includes PFOA, PFOS, and GenX): According to [NC Policy Watch](#), there are no federal or state health standards or regulations to control these chemicals.

The following text is adapted from the Haw River Assembly website: “The health advisory goal for the combined total of PFOA and PFOS is **70 micrograms for every liter of drinking water**, or less. These are only two of several PFAS compounds we

have found in Pittsboro. The combined total for all 10 of these PFAS compounds is about **1076 micrograms for every liter of drinking water**.

- **1,4 dioxane:** According to [NC Policy Watch](#), there are no federal or state health standards or regulations to control these chemicals.

The following text is adapted from the Haw River Assembly website and data from the Department of Environmental Quality (DEQ): The health standard for 1,4 Dioxane is **0.35 microgram for every liter of drinking water**. The numbers in Pittsboro vary widely, with some readings **as high as 100 micrograms for every liter of drinking water**

- **Bromides:** this one is a bit more complicated. We hope to get some guidance from experts before we summarize this issue. Stay tuned!

IMPORTANT NOTE: From [ncpolicywatch.com](#): “DEQ’s rulemaking authority is limited by existing law and legislative oversight.” In other words, these chemicals are not being regulated because legislation to increase oversight and regulation are constantly being stalled at the state and federal levels.

7. Where did these contaminants come from? (UPDATED 8.10.20)

Several studies have confirmed that the contaminants are flowing downstream from industries located in Greensboro, Reidsville, and Burlington (see map in FAQ #1). The following [article](#) contains useful background information and recommendations from the October 2019 forum held in Pittsboro. It also contains a synopsis of the story behind the source of the pollution.

8. What are the health risks involved with this exposure?

With exposure to PFAS, scientific studies have found increased risks of thyroid disorders, testicular and kidney cancer, depressed immunity, low birth weight, high cholesterol, and risk of preeclampsia in pregnant women. Health risks associated with exposure to 1,4 dioxane and bromide include liver and kidney damage and cancer.

9. What needs to happen to save our waterway and our drinking water?

Three specific things need to happen:

- 1) The contamination needs to be stopped at its source.
- 2) Our city’s water treatment needs to be upgraded to eliminate these contaminants before they reach our home.

3) We need state and federal regulations to protect communities from these emerging contaminants

There are several important actions that you can get involved in to help raise awareness and put pressure on city leaders. To stay up to date with these items, you can do the following:

- Join the Haw River Assembly. Membership is free and you will be added to a listserv that includes actions items related to protecting the Haw River
- Like and engage with the Clean Haw River facebook page, whose sole dedication is to provide quick and easy access to information and ways to take action.
- Call on your city leaders directly. You can find contact information for Mayor Nass and the Board of Commissioners [here](#)
- Engage with your neighbors and community. Share information, petitions, news stories, etc. Share personal stories. Help educate your neighbors about this pressing problem.

10. How can we get the guilty parties to stop sending their poison downriver?

The only way to stop the influx of toxins is government regulation. We need ALL communities tied to the Haw River Watershed to have a seat at the table as we work towards eliminating the source of these contaminants upstream.

Last November (2019) the Southern Environmental Law center filed a Notice of Intent (e.g. an intent to sue) to Burlington, NC regarding their discharges, which violate the Clean Water Act. Greensboro and Reidsville received Notices of Violation in Fall 2019 regarding 1,4 Dioxane discharges into the Haw River. The Haw River Assembly continues to monitor these cases and will continue to pursue legal action against municipalities that are responsible for discharging these contaminants.

11. I am on city water here in Pittsboro. What can I do *right now* to safeguard my family?

In the interest of utmost precaution, **do not drink the tap water**. There are several alternatives available, at ranging price points.

(1) Buy bottled water.

(2) Invest in a water delivery service or pick up your water in bulk from a grocer

(3) Invest in a home filtration system. The only system shown to significantly reduce PFAS and 1,4 Dioxane is called a “reverse osmosis” filtration system. Prices range greatly from about \$200 to over \$1,000. These systems are available online and at local retailers.

Please keep in mind the following.

- Boiling the water WILL NOT REMOVE THESE CHEMICALS
- Using a standard faucet or pitcher filter (Brita, etc.) WILL NOT REMOVE THESE CHEMICALS

12. I'd like to learn more about the recommended home filtration systems. (NEW 8.10.20)

While there are no standard regulations for filtering emerging contaminants like PFAS and 1,4 Dioxide, the National Science Foundation (NSF), one of the top federal scientific agencies, has provided a list of certified drinking water treatment units for consumers. You can access their search engine [here](#). Clean Haw River reached out to Dr. Detlef Knappe, a water quality and treatment researcher and professor at NC State, who provided the following recommendations based on NSF's guidelines:

The best option is called a **reverse osmosis(RO)** filtration system. Most come with a unit that is housed under the sink that feeds filtered water to a separate faucet on the counter (see image on the right). Take note: a point-of-entry system will only provide filtered water to the faucet connected to the unit. Any other faucets or sources of water would not be filtered through the system. This means that water used for ice-maker, washing machines, bath tubs/showers, bathroom sinks, etc. would not be filtered.

Experts recommend a point-of-entry, under sink RO system rather than a whole-house filter, which has the potential to lead to build-up of bacteria.



13. What can I do to help with this important cause? (NEW 8.10.20)

Excellent question! You can help by spreading the word to your friends and neighbors about this problem. Direct those who want to learn more to the Clean Haw River Facebook page. Our primary goal is to educate and empower our neighbors. The Facebook page is a great resource for information, but it also provides a quick and easy way to find out about specific actions the public can take to be part of our collective protest against upstream polluters as well as the lack of transparency from our local officials. We will provide links to petitions, updates on legal actions, and recommendations to help keep you and your family safe. We ask that you like, share, and follow us so that we can reach every Pittsboro resident. Sign the petitions, write the letters, share your stories! Let your voice be heard!

Have more questions?

Please fill out this [form](#) to add a question to this document. We will answer it and update this document as soon as possible.

Where did the information in this FAQ come from?

1. American Rivers: www.americanrivers.org/river/haw-river/
2. The Agency for Toxic Substances and Disease Registry (www.astdr.cdc.gov)
3. The City of Pittsboro: www.pittsboronc.gov
4. Department of Environmental Quality (DEQ):
<https://deq.nc.gov/news/key-issues/emerging-compounds/managing-emerging-compounds-water#management-strategy-for-industrial-dischargers-and-pretreatment-facilities>
5. Environmental Protection Agency: “Potential drinking water effects of bromide discharges from coal-fired electric power plants”:
<https://www3.epa.gov/region1/npdes/merrimackstation/pdfs/Comments2RevisedDraftPermit/VanBriesenReport.pdf>
6. The Haw River Assembly website and associated documents:
<http://hawriver.org/wp-content/uploads/2018/10/How-Safe-is-Your-Drinking-Water.pdf>
7. National Science Foundation’s Certified Drinking Water Treatments:
<https://info.nsf.org/Certified/DWTU/>
8. NC Health News:
<https://www.northcarolinahealthnews.org/2014/04/07/coal-waste-may-cause-carcinogen-spikes-in-drinking-water/>
9. NC Policy Watch
<http://www.ncpolicywatch.com/2017/07/20/genx-chromium-6-14-dioxane-no-federal-state-regulations-less-guidance-protect-drinking-water/>
10. NC State University News: <https://news.ncsu.edu/2018/04/finding-genx/>