

NEW HANOVER COUNTY

BOARD OF COMMISSIONERS

230 Government Center Drive, Suite 175, Wilmington, NC 28403 P: (910) 798-7149 | F: (910) 798-7145 | NHCgov.com

Bill Rivenbark, Chair | LeAnn Pierce, Vice-Chair

Dane Scalise, Commissioner | Stephanie A.C. Walker, Commissioner | Rob Zapple, Commissioner

August 12, 2025

Dr. Devdutta Sangvai, Secretary NC Department of Health and Human Services 2001 Mail Service Center Raleigh, NC 27699-2000

Dear Secretary Sangvai:

In March, the New Hanover County Board of Commissioners sent a letter to the Environmental Management Commission (EMC) requesting rule making and regulation for 1,4-dioxane and outlined support for health standards to be created by DEQ and EPA. That letter is attached for your reference.

New Hanover County is now imploring you as NCDHHS Secretary to establish a state-specific preliminary health goal for 1,4-dioxane in drinking water. By setting reasonable exposure limits, the EMC can move forward with the important task of rulemaking and regulation for these potentially harmful chemicals. This critical step of setting a preliminary health goal is in line with the work done previously around GenX when it was identified in our community's drinking water source; and we ask you to take that same important step for 1,4-dioxane on behalf of the health of our residents.

Our community is united in this request, as evidenced in the attached letters from the New Hanover County Board of Commissioners, Cape Fear Public Utility Authority, and Wilmington City Council.

New Hanover County urges you to prioritize this issue and take action on setting a 1,4-dioxane health goal. We appreciate your attention to this pressing need and thank you for your work to improve the health of all North Carolina residents.

Sincerely,

Rill Rivanhark

Chair

Enclosures

cc: County Commissioners
Wilmington City Council
County Manager
City Manager
CFPUA



NEW HANOVER COUNTY

BOARD OF COMMISSIONERS

230 Government Center Drive, Suite 175, Wilmington, NC 28403 P: (910) 798-7149 | F: (910) 798-7808 | NHCgov.com

Bill Rivenbark, Chair | LeAnn Pierce, Vice-Chair

Dane Scalise, Commissioner | Stephanie A.C. Walker, Commissioner | Rob Zapple, Commissioner

March 6, 2025

N.C. Environmental Management Commission Chair John (JD) Solomon Water Quality Committee Chair Steve P. Keen 1617 Mail Service Center Raleigh, NC 27699-1617

Dear Chair Solomon and Members of the Water Quality Committee:

We write in support of Cape Fear Public Utility Authority's (CFPUA) request to the Environmental Management Commission (EMC) for regulation of 1,4-dioxane, to include adopting and implementing a minimization plan that would set clear, enforceable limits on the discharge of 1,4-dioxane. We further support the work of the N.C. Department of Environmental Quality (DEQ) and Environmental Protection Agency (EPA) to set health standards related to water quality.

New Hanover County has been at the forefront of water quality issues since 2017, when we discovered the presence of GenX and other per- and polyfluoroalkyl substances (PFAS) in the Cape Fear River, which is our residents' primary source of drinking water. As a downstream community, we are directly impacted by any and all pollutants that enter our water system upstream.

CFPUA has been forced to invest more than \$50 million in advanced filtration systems to address PFAS contamination, a critical effort to protect the health of our residents. While lawsuits have been filed to recoup those and other related costs, there has been no meaningful recovery up to this point. As a result, the financial burden of these efforts has been unfairly passed on to many of our residents.

New Hanover County and CFPUA have done and will never stop doing our part to safeguard our citizens, but we need the sources of contamination upstream to be addressed and regulated.

Without discharge limits in place for 1,4-dioxane, CFPUA estimates costs of roughly \$24 million for ongoing, effective treatment to filter these potentially harmful chemicals from residents' drinking water. This would be yet another burden on ratepayers who would face increased costs caused by something that was no fault of their own. This is unacceptable.

As the elected body representing nearly 240,000 residents, we have long supported legislative and regulatory efforts aimed at holding polluters accountable. We believe the most effective way to protect drinking water, safeguard the health and safety of residents and shield downstream users from financial burden is to limit or stop pollution at its source.

We respectfully request the EMC, as the entity responsible for adopting rules for the protection, preservation, and enhancement of the state's air and water resources, to initiate rulemaking for an 1,4-dioxane minimization initiative so that the waters of North Carolina and the public health of our citizens are protected.

Please confirm receipt of this correspondence and advise us of your plans to address the issues identified herein.

Sincerely,

Bill Rivenbark, Chair

LeAnn Pierce, Vice Chair

Dane Scalise, Commissioner

Rob Zapple, Commissioner

Stephanie Walker, Commissioner

cc: CFPUA

Wilmington City Council

U.S. Sen. Thom Tillis

U.S. Sen. Ted Budd

U.S. Rep. David Rouzer

N.C. Sen. Michael Lee

N.C. Sen. Bill Rabon

N.C. Rep. Ted Davis

N.C. Rep. Deb Butler

N.C. Rep. Charlie Miller



Kenneth Waldroup Executive Director 235 Government Center Drive Wilmington, NC 28403 910-332-6669 kenneth.waldroup@cfoua.org

July 22, 2025

By Electronic Mail

Dr. Devdutta Sangavi, Secretary North Carolina Department of Health and Human Services 2001 Mail Service Center Raleigh, NC 27699-2001

Re: Request for Development of a Preliminary Health Goal for 1,4-Dioxane

Dear Secretary Sangavi:

On behalf of the Cape Fear Public Utility Authority (CFPUA), I respectfully and urgently request that the North Carolina Department of Health and Human Services (NC-DHHS) develop a **state-specific Preliminary Health Goal (PHG)** for **1,4-dioxane in drinking water**. This specific health goal is critically important to provide essential guidance to the Environmental Management Commission (EMC) as it considers draft 1,4 dioxane rulemaking, and would offer the public a clear, science-based understanding of safe long-term exposure levels to this emerging contaminant.

In 2017, NC-DHHS played a pivotal role in addressing public concern and scientific uncertainty surrounding GenX by issuing a **Preliminary Health Goal of 140 ppt** based on a rigorous assessment of toxicological risk and exposure assumptions. This action provided critical clarity to CFPUA and other affected communities and decision-makers and laid the groundwork for broader regulatory responses. Similar action is needed today with 1,4-dioxane.

The U.S. Environmental Protection Agency (EPA) considers 1,4-dioxane to be a likely human carcinogen. In a November 2017 Technical Fact Sheet, the EPA made its carcinogen determination of 1,4-dioxane, with additional concerns regarding long-term exposure symptoms of potential kidney and liver damage. According to the EPA, drinking water concentrations of 35 parts per billion (ppb) constitutes a cancer risk of 1 in 10,000 while a concentration of 0.35 ppb represents a more-protective 1-in-1 million cancer risk. The Cape Fear River was found to have one of the highest levels of 1,4-dioxane in the United States, demonstrated by the sampling performed during the 2013 Unregulated Contaminant Monitoring Rule 3 (UCMR 3) and subsequent monitoring by the North Carolina Department of Environmental Quality (NCDEQ).

Page 2

Despite the risk 1,4-dioxane poses to human health and its prevalence in the Cape Fear River, no safe maximum exposure limit has been established by North Carolina health agencies, and no limits on concentrations for surface drinking water sources have been set by NCDEQ or the EMC.

For CFPUA and our customers, more than 200,000 residents in Wilmington and New Hanover County, this presents a very real and ongoing concern. The Cape Fear River is our primary raw water source, and it receives upstream discharges of 1,4-dioxane that have resulted in measurable concentrations at our intake point in Bladen County nearly every year since monitoring began, with a 5-year average of 1.21 ppb and levels exceeding 0.80 ppb in 2024. An authoritative determination about whether this exposure is a public health risk to our customers is long overdue.

In many ways, the occurrence of 1,4-dioxane in the Cape Fear River mirrors the discovery of GenX contamination. Like GenX, 1,4-dioxane entered the watershed largely undetected for years, accumulating in downstream drinking water supplies without regulatory oversight or public awareness. Routine testing conducted by CFPUA and its partners has since confirmed that 1,4-dioxane is present in the Cape Fear River at levels exceeding federal health advisory benchmarks, with limited options for removal through conventional treatment. Like GenX, this contaminant disproportionately affects downstream communities that must bear the burden of exposure and cost of treatment. As with the state's response to GenX, the emergence of 1,4-dioxane underscores the need for NC-DHHS to lead with timely, science-based public health guidance to inform state policy and community action.

While CFPUA has invested in advanced treatment that can remove approximately 50% of incoming 1,4-dioxane, many upstream public water systems lack this capability. Without clear state-level health guidance, utilities and regulators alike lack the foundation needed to make consistent decisions about permitting, monitoring, and treatment investment.

We urge NC-DHHS to provide the same public health leadership it demonstrated in the Preliminary Health Goal for GenX by initiating the process of developing a state PHG for 1,4-dioxane. Establishing such a goal, based on available toxicological data and best practices for lifetime exposure modeling, would provide a much-needed benchmark for protecting public health and managing the risks of this contaminant in drinking water.

Thank you for your continued commitment to the health of North Carolinians. CFPUA stands ready to support your efforts and looks forward to working in partnership to address this urgent need.

Sincerely,

Kenneth R. Waldroup

Kenneth R. Waldroup, PE Executive Director, CFPUA

Electronic Copy
CFPUA Board
New Hanover County leadership
City of Wilmington leadership

NCGA Delegation Leadership, NCDEQ Secretary Reid Wilson, NCDEQ



Mayor and City Council

Mayor Bill Saffo

Mayor Pro-Tem Clifford D. Barnett, Sr.

Council Members

Charles H. Rivenbark Kevin Spears Luke Waddell, Sr. Salette Andrews David B. Joyner

City of Wilmington

City Hall
929 N Front Street
PO Box 1810
Wilmington, NC
28402-1810
910.341.7815
910.341.4628 fax
wilmingtonnc.gov
Dial 771 TTY/Voice

August 4, 2025

Dr. Devdutta Sangavi, Secretary North Carolina Department of Health and Human Services 2001 Mail Service Center Raleigh, NC 27699-2001

Re: Request for Development of a Preliminary Health Goal for 1,4-Dioxane

Dear Secretary Sangavi:

As a joint council, we at the City of Wilmington respectfully and urgently request that the North Carolina Department of Health and Human Services (NC-DHHS) develop a state-specific Preliminary Health Goal (PHG) for 1,4-dioxane in drinking water. This specific health goal is critically important to provide essential guidance to the Environmental Management Commission (EMC) as it considers draft 1,4 dioxane rulemaking, and would offer the public a clear, science-based understanding of safe long-term exposure levels to this emerging contaminant.

In 2017, NC-DHHS played a pivotal role in addressing public concern and scientific uncertainty surrounding GenX by issuing a Preliminary Health Goal of 140 ppt based on a rigorous assessment of toxicological risk and exposure assumptions. This action provided critical clarity and laid the groundwork for broader regulatory responses. Similar action is needed today with 1,4-dioxane.

The U.S. Environmental Protection Agency (EPA) considers 1,4-dioxane to be a likely human carcinogen. In a November 2017 Technical Fact Sheet, the EPA made its carcinogen determination of 1,4-dioxane, with additional concerns regarding long-term exposure symptoms of potential kidney and liver damage. According to the EPA, drinking water concentrations of 35 parts per billion (ppb) constitutes a cancer risk of 1 in 10,000 while a concentration of 0.35 ppb represents a more-protective 1-in-1 million cancer risk. The Cape Fear River was found to have one of the highest levels of 1,4-dioxane in the United States, demonstrated by the sampling performed during the 2013 Unregulated Contaminant Monitoring Rule 3 (UCMR 3) and subsequent monitoring by the North Carolina Department of Environmental Quality (NCDEQ).

Despite the risk 1,4-dioxane poses to human health and its prevalence in the Cape Fear River, no safe maximum exposure limit has been established by North Carolina health agencies, and no limits on concentrations for surface drinking water sources have been set by NCDEQ or the EMC.

For the City of Wilmington, this presents a very real and ongoing concern. The Cape Fear River is our primary raw water source, and it receives upstream discharges of 1,4-dioxane that have resulted in measurable concentrations at our intake point in Bladen County nearly every year since monitoring began, with a 5-year average of 1.21 ppb and levels exceeding 0.80 ppb in 2024. An authoritative determination about whether this exposure is a public health risk to our citizens is long overdue. As with the state's response to GenX, the emergence of 1,4-dioxane underscores the need for NC-DHHS to lead with timely, science-based public health guidance to inform state policy and community action.

The City of Wilmington joins the Cape Fear Public Utility Authority (CFPUA) in urging NC-DHHS to provide the same public health leadership it demonstrated in the Preliminary Health Goal for GenX by initiating the process of developing a state PHG for 1,4-dioxane. Establishing such a goal, based on available toxicological data and best practices for lifetime exposure modeling, would provide a much-needed benchmark for protecting public health and managing the risks of this contaminant in drinking water.

Thank you for your continued commitment to the health of North Carolinians. The City of Wilmington stands ready to support your efforts and looks forward to working in partnership to address this urgent need.

Sincerely

Bill Saffo Mayor

Charlie Rivenbark
Councilmember

Luke Waddell Councilmember Clifford Barnett Mayor Pro-tem

Kevin Spears Councilmember

David Joyner) / Councilmember

Salette Andrews Councilmember