

Blue Ridge Environmental Defense League

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September 17, 2020

Sheila Holman, DEQ Assistant Secretary
Assistant Secretary's Office
1601 Mail Service Center
Raleigh, NC 27699-1601

RE: Chemours Public Comments

Dear Ms. Holman:

On behalf of the Blue Ridge Environmental Defense League, I write to comment on the proposed Addendum to the Consent Order Paragraph 12, which requires additional actions by Chemours to prevent PFAS pollution from entering the Cape Fear River via contaminated groundwater from the Fayetteville Works Site.

As you know, PFAS, perfluoroalkyl substances, are manmade, fluorinated compounds, also known as PFC, polyfluorinated compounds. The term PFAS includes a class of more than 5,000 compounds, such as Perfluorooctane Sulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA), GenX (in which the PFAS hexafluoropropylene oxide is used to manufacture) and many more. The problems are that PFAS are persistent chemicals which do not break down in soil or water, which can bioaccumulate in the food chain and which have negative impacts on human health.

According to the US EPA: "Studies indicate that PFOA and PFOS can cause reproductive and developmental, liver and kidney, and immunological effects in laboratory animals. Both chemicals have caused tumors in animals."¹

Further, the national Center for Health and Environmental Justice finds,

Human studies found similar results to animal studies, namely associations between PFCs and liver, hormone, and immune system function. Some epidemiological studies have linked PFC exposure to kidney and testicular cancers in people. In addition, PFC exposure has been linked to hypertension in pregnant women, slightly lower birth weight in infants and elevated blood cholesterol levels. Other studies have found that higher PFC levels are associated with a potential decrease in vaccine efficacy.² (citations omitted)

In 2016 an EPA health advisory set a limit of 0.07 ug/L for both PFOS and PFOA combined in water.³

¹ USEPA, "Basic Information on PFAS," <https://www.epa.gov/pfas/basic-information-pfas>

² Center for Health and Environmental Justice "PFC Fact Sheet," <http://chej.org/wp-content/uploads/PFC-Fact-Sheet-Toxicity.pdf>

³ USEPA Fact Sheet PFOA & PFOS Drinking Water Health Advisories, May 2016, EPA 800-F-16-003. https://www.epa.gov/sites/production/files/2016-06/documents/drinkingwaterhealthadvisories_pfoa_pfos_updated_5.31.16.pdf

Going the EPA one better, on July 24, 2019, the state of New York adopted a rule which set enforceable limits for PFOA and PFOS at 10 parts per trillion, and for 1,4-dioxane at 1 part per billion. And these maximum contaminant limits apply to all 278 water systems in the state, with testing to have begun within six months.

Effective ways of removing PFAS from contaminated drinking water are available: activated carbon treatment, ion exchange resins, nanofiltration or reverse osmosis. The question of who is to pay must be answered. We believe that the source should be the deep pockets of the manufacturers who invented and mass-produced the problem.

Contaminants of Emerging Concern is a term used by water quality professionals to describe pollutants that have been detected in water bodies that may cause ecological or human health impacts and typically are not regulated under current environmental laws.⁴

The discovery of PFAS in the Cape Fear watershed, along with 1,4 dioxane and other emerging contaminants, should spur a rapid science-based response by state and local public officials in North Carolina. And the response must include a statewide public system which affords people the ability to find their potential exposure and health risk in order to take steps to protect themselves, their families and their communities.

Respectfully,

A handwritten signature in black ink that reads "Louis A. Zeller". The signature is written in a cursive style and is positioned above a horizontal line.

Louis A. Zeller
Executive Director

⁴ Contaminants of Emerging Concern including Pharmaceuticals and Personal Care Products". Water Quality Criteria. Washington, D.C.: U.S. Environmental Protection Agency (EPA). 2019-08-19, <https://www.epa.gov/wqc/contaminants-emerging-concern-including-pharmaceuticals-and-personal-care-products>