NC Conservation Network ● Southern Environmental Law Center

June 17, 2022

Richard Rogers, Director
Division of Water Resources
NC Department of Environmental Quality
217 West Jones Street
Raleigh, NC 27603

Re: Request pursuant to 15A NCAC 02L .0202(c) for withdrawal of the 2006 PFOA IMAC

Dear Director Rogers,

We write today to ask that you withdraw the current Interim Maximum Allowable Concentration (IMAC) for perfluorooctanoic acid (PFOA), set in December 2006 at 2000 parts per trillion (ppt).

As you know, PFOA is one chemical in the much larger class of toxic pre- and polyfluorinated alkyl substances (PFAS), also dubbed 'forever chemicals' for their longevity in the environment. Until 2015, PFOA was manufactured at and released from DuPont's Fayetteville Works plant, owned since that date by Chemours. In addition, PFOA traditionally appeared as a component of PFAS-containing Aqueous Film Forming Foams (AFFFs), and many current PFAS-containing foams include PFAS that degrade into PFOA.[1] Several other PFAS in commercial use degrade over time into PFOA.[2] While the extent of PFOA contamination across North Carolina is poorly documented, it is likely that multiple instances of PFOA contamination of soil and groundwater will be discovered in the coming years, as testing for PFAS becomes a standard element of due diligence and site assessment for development projects and real estate transactions.

Since the current IMAC was issued in 2006, scientific studies of this bioaccumulating toxic have increasingly shown that there is no safe measurable level of exposure to this compound. Just this week, the US Environmental Protection Agency (EPA) released an updated human health value for PFOA set at 4 parts per quadrillion (ppq), just 1/500,000th of the IMAC.[3] The key endpoint driving the new health value is suppression of vaccine response in exposed infants and children.[4] EPA's supporting scientific materials include epidemiological and animal studies finding that exposure to PFOA is associated with

[1] Interstate Technology Regulatory Council (ITRC), factsheet: Aqueous Film-Forming Foam (AFFF), April 2020.
[2] Emiliano Panieri et al., PFAS Molecules: A Major Concern for the Human Health and the Environment, Toxics, 2022, 10:44, at 8 (noting that longer-chain PFAS and such precursors as 8:2 FTOH can degrade into PFOA), https://doi.org/10.3390/toxics10020044.
[3] US EPA, Interim Drinking Water Health Advisory: Perfluorooctanoic Acid (PFOA), CASRN 3357-67-1.
[4] *Id*., at 7.

harm to the liver, cardiovascular system, immune system, metabolic system, endocrine system, and developmental processes.[5]

Under 15A NCAC 02L .0202(c), recently re-adopted by the Environmental Management Commission (EMC), "any person may request the Director of the Division of Water Resources to update or remove an existing IMAC in accordance with the specific guidelines listed in [15A NCAC 02L .0202(c)(1)-(9).] The requestor shall submit relevant toxicological and epidemiological data, study results, and calculations in accordance with [15A NCAC 02L .0202(d) and (e).]"

EPA's updated PFOA health value document and supporting materials include all the information required by the state rule, and we incorporate them here by reference. Specifically, the 'toxicological and epidemiological data and study results' are in the Proposed Approaches to the Derivation of a Draft Maximum Contaminant Level Goal for Perfluorooctanoic Acid (PFOA), December 2021, and the calculations used to derive the health value are in the Interim Drinking Water Health Advisory: Perfluorooctanoic Acid (PFOA), June 2022.[6] There is no Integrated Risk Information System (IRIS) value for PFOA at this time, but the EPA health value is itself the next most preferred reference listed in 15A NCAC 02L .0202(e). We believe this material satisfies the technical requirements of the state rule. Substantively, it justifies a decision to withdraw the obsolete PFOA IMAC.

In the absence of an IMAC, the target for remediation of PFOA contamination will revert to the practical quantitation limit (PQL), at least until such time as the Division issues another IMAC or the EMC adopts a permanent groundwater quality standard for this toxic chemical. The updated health value for PFOA released by EPA this week is far, far below the current limits of detection. We will support EMC rulemaking to set groundwater standards at that health value.

Given what we now know about the toxicity of PFOA and the dangers it presents to public health, we urge you to move as quickly as possible to withdraw the 2006 IMAC.

Sincerely,

Brian Buzby
Executive Director
NC Conservation Network

Geoff Gisler
Senior Attorney & Clean Water Program Leader
Southern Environmental Law Center

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[5] US EPA, External Peer Review Draft: Proposed Approaches to the Derivation of a Draft Maximum Contaminant Level Goal for Perfluorooctanoic Acid (PFOA) (CASRN 335-67-1) in Drinking Water, December 2021; *see also*, US EPA, Office of Water, Analysis of Cardiovascular Disease Risk Reduction as a Result of Reduced PFOA and PFOS Exposure in Drinking Water, November 2021, and Appendices.

[6] We also incorporate by reference the comments and responses of EPA's Science Advisory Board to the Proposed Approaches document, titled Review of EPA's Analyses to support EPA's National Primary Drinking Water Rulemaking for PFAS, April 2022. Like the Proposed Approaches document, the Review is not EPA policy; rather, both summarize relevant, up-to-date scientific data and studies that demonstrate that the 2006 PFOA IMAC has become woefully obsolete, is not protective of human health, and should be withdrawn.