



April 27, 2023

Mr. Marcos A. Orellana

U.N. Special Rapporteur on the implications for human rights of  
the environmentally sound management and disposal of hazardous substances and wastes

Via email: [hrc-sr-toxicshr@un.org](mailto:hrc-sr-toxicshr@un.org)

Dear Mr. Orellana,

We write to you, in your capacity as the U.N. Special Rapporteur tasked with examining the human rights implications of hazardous substances and wastes throughout their life cycle, regarding an environmental human rights crisis in North Carolina involving pervasive human exposure to toxic chemicals. There, in the lower reaches of the Cape Fear River watershed, more than 500,000 residents have been chronically exposed to dangerous quantities of PFAS that emanate from a Chemours manufacturing plant, formerly owned by DuPont, known as Fayetteville Works.<sup>1</sup>

Incredibly—and without meaningfully redressing past and ongoing harm from its toxic air emissions and discharges into the Cape Fear River, and the resulting widespread contamination of local drinking water—facility owner Chemours now proposes to *expand* its production of PFAS. Pursuant to your mandate under Human Rights Council Resolution 36/6, we seek your urgent intervention to actualize local residents' human rights to safe drinking water, bodily integrity, health, a life with dignity, and an environment free from toxic contamination.

Clean Cape Fear requests (a) Special Procedures communications to DuPont and Chemours, the North Carolina Department of Environmental Quality, and the U.S. Environmental Protection Agency, in the form of letters of allegation; (b) preparation of a report on these entities' violation of North Carolinians' environmental human rights; and (c) a press release and press conference to raise public awareness of the toxic exposure crisis motivating these interventions.

Respectfully submitted,

Clean Cape Fear

*by and with*

U.C. Berkeley Environmental Law Clinic

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<sup>1</sup>See 2022 Annual Report, CAPE FEAR PUB. UTIL. AUTH. (2022), <https://perma.cc/KY3P-59F2> (stating that the utility serves 200,000 people); *Frequently Asked Questions: Water Treatment Upgrades and Rates*, BRUNSWICK CNTY. GOV'T, <https://perma.cc/U6GQ-2KJN> (stating that the utility serves over 300,000 people).

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## FACTS

For more than four decades, the Fayetteville Works manufacturing plant along the lower Cape Fear River in Bladen County, North Carolina has contaminated air, soil, surface water, and groundwater with a suite of toxic man-made chemicals commonly known as “PFAS” (per- and polyfluoroalkyl substances). Corporate owner E.I. DuPont de Nemours (DuPont), and later, its spin-off The Chemours Company, LLC (Chemours), have over time exposed local residents to more than 300 distinct PFAS chemicals.<sup>2</sup> Many PFAS manufactured at Fayetteville Works, including the PFOA historically produced and the GenX that is still produced, are known to be severely toxic.<sup>3</sup> Dozens to hundreds of additional PFAS are under clouds of toxicological suspicion because of their structural similarity to known-harmful PFAS, as academic, government, and civil-society scientists scramble to fill data gaps in the face of an ever-mounting contamination crisis.<sup>4</sup>

PFAS exposure impairs nearly every system in the human body, ranging from organ function to immune response to fertility (*see box*, p.2). The ability of PFAS to cause acute, chronic, and sometimes lethal health harm is well documented in scientific literature.<sup>5</sup> The chemicals’ adverse impacts also extend to livestock, pets, fish, and wildlife, and to the broader environment.<sup>6</sup>

PFAS additionally spread well beyond their point of manufacture to causing toxic pollution globally,<sup>7</sup> carried by air and ocean currents. Further, because the carbon-fluorine bond in PFAS stubbornly resists degradation, PFAS endure so long in the environment that they have been dubbed “forever chemicals.” As Dr. Joseph Allen explained in coining that phrase: “Normally, when we think about persistent chemicals, it’s bad on the order of decades. With these chemicals, the persistence is on the order of millennia.”<sup>8</sup>

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<sup>2</sup> An analysis that Chemours was required to conduct as per a 2019 consent order with DEQ revealed more than 250 “unknown” PFAS chemicals in Chemours’ wastewater and stormwater discharge. The Chemours Company LLC, *PFAS Non-targeted Analysis and Methods Interim Report: Process and Non-Process Wastewater and Stormwater* (June 30, 2020), at 4. These chemicals are in addition to the 54 known PFAS that are the subject of a citizen petition to EPA under the Toxic Substances Control Act. Center for Environmental Health, et al., *Petition to Require Health and Environmental Testing Under the Toxic Substances Control Act on Certain PFAS Manufactured by Chemours in Fayetteville, North Carolina* (Oct. 13, 2020), at 4 (“Petitioners have identified a total of 54 PFAS (not including legacy substances) that are attributable to the Chemours facility and have been detected in environmental media and/or people in the Cape Fear River watershed adjacent to and downstream of the plant site.”).

<sup>3</sup> *Questions and Answers: Drinking Water Health Advisories for PFOA, PFOS, GenX Chemicals & PFBS*, U.S. EPA (Mar. 14, 2023), <https://www.epa.gov/sdwa/questions-and-answers-drinking-water-health-advisories-pfoa-pfos-genx-chemicals-and-pfbs> (regarding toxicity of PFOA); Cheryl Hogue, *US EPA deems two GenX PFAS chemicals more toxic than PFOA*, CHEM. & ENG. NEWS (Oct. 29, 2021), <https://cen.acs.org/environment/persistent-pollutants/US-EPA-deems-two-GenX-PFAS-chemicals-more-toxic-than-PFOA/99/i40/>.

<sup>4</sup> See U.S. EPA, *National PFAS Testing Strategy: Identification of Candidate Per- and Polyfluoroalkyl Substances (PFAS) for Testing* (Oct. 2021), <https://www.epa.gov/system/files/documents/2021-10/pfas-natl-test-strategy.pdf> (identifying more than 20 PFAS for further toxicological assessment).

<sup>5</sup> See generally Agency for Toxic Substances & Disease Registry, *Toxicological Profile for Perfluoroalkyls* (May 2021), <https://stacks.cdc.gov/view/cdc/59198>; see also sources in Inset Box, *infra* p.3.

<sup>6</sup> *PFAS Explained*, U.S. EPA (Apr. 28, 2022), <https://www.epa.gov/pfas/pfas-explained>.

<sup>7</sup> *Id.*

<sup>8</sup> Dr. Joseph Allen, Associate Professor of Exposure Assessment Science, Harvard T.H. Chan School of Public Health, as quoted in Kristin Toussaint, *How PFAS were cleverly rebranded as “forever chemicals,”* Fast Company, Mar. 17, 2013, <https://www.fastcompany.com/90866808/how-pfas-were-cleverly-rebranded-as-forever-chemicals>.

**PFAS Health Effects**  
(selected peer-reviewed literature)

- **cancer**
  - o Suzanne E. Fenton, et al., *Per- and Polyfluoroalkyl Substance Toxicity and Human Health Review: Current State of Knowledge and Strategies for Informing Future Research*, 40 ENVTL. TOXICOLOGY & CHEM. 606 (2020).
  - o Mindi F. Messmer et al., *Risk of Cancer in a Community Exposed to Per- and Poly-Fluoroalkyl Substances*, 16 ENV'T HEALTH INSIGHTS 1 (2022).
- **high cholesterol, heart disease, & hypertension**
  - o Gisella Pitter et al., *Perfluoroalkyl substances are associated with elevated blood pressure and hypertension in highly exposed young adults*, 19 ENVTL. HEALTH 102 (2020).
  - o Soon Hoe Ho et al., *Perfluoroalkyl substances and lipid concentrations in the blood: A systematic review of epidemiological studies*, 850 SCI. OF THE TOTAL ENV'T 158036 (2022).
- **thyroid disease**
  - o Francesca Coperchini et al., *Thyroid Disrupting Effects of Old and New Generation PFAS*, 11 FRONTIERS IN ENDOCRINOLOGY 612320 (2022).
- **reduced fertility, pregnancy complications, & low birth weight**
  - o Wei Wang et al., *The effects of perfluoroalkyl and polyfluoroalkyl substances on female fertility: A systematic review and meta-analysis*, 216 ENVTL. RSCH. 114718 (2023).
  - o Tengruai Cao et al., *The relationship between maternal perfluoroalkylated substances exposure and low birth weight of offspring: a systematic review and meta-analysis*, 28 ENVTL. SCI. & POLLUTION RSCH. 67053 (2021).
  - o Abigail Erinc et al., *Considering environmental exposures to per- and polyfluoroalkyl substances (PFAS) as risk factors for hypertensive disorders of pregnancy*, 197 ENVTL. RSCH. 111113 (2021).
- **immune deficiency**
  - o Haley von Holst et al., *Perfluoroalkyl substances exposure and immunity, allergic response, infection, and asthma in children: review of epidemiologic studies*, 7 HELIYON 1 (2021).
- **cognitive and neurobehavioral development**
  - o Ann M. Vuong et al., *Prenatal and childhood exposure to poly- and perfluoroalkyl substances (PFAS) and cognitive development in children at age 8 years*, 172 ENVTL. RSCH. 242 (2019).
  - o Thea S. Skogheim et al., *Prenatal exposure to perfluoroalkyl substances and associations with symptoms of attention-deficit/hyperactivity disorder and cognitive functions in preschool children*, 223 INT'L J. OF HYGIENE & ENVTL. HEALTH 80 (2020).
- **liver damage**
  - o Samira Salihovic et al., *Changes in markers of liver function in relation to changes in perfluoroalkyl substances - A longitudinal study*, 117 ENV'T INT'L 196 (2018).
- **obesity**
  - o Joseph M. Braun et al., *Prenatal Perfluoroalkyl Substance Exposure and Child Adiposity at 8 Years of Age: The HOME Study*, 24 OBESITY 231 (2016).
  - o Ana Maria Mora et al., *Prenatal Exposure to Perfluoroalkyl Substances and Adiposity in Early and Mid-Childhood*, 125 ENVTL. HEALTH PERSP. 467 (2017).
- **diabetes**
  - o Nuria Matilla-Santander et al., *Exposure to Perfluoroalkyl Substances and Metabolic Outcomes in Pregnant Women: Evidence from the Spanish INMA Birth Cohorts*, 125 ENVTL. HEALTH PERSP. 117004 (2017).
- **asthma**
  - o Allison J. Burbank et al., *Associations between serum per- and polyfluoroalkyl substances and asthma morbidity in the National Health and Nutrition Examination Survey (2003-18)*, 2 J. OF ALLERGY & CLINICAL IMMUNOLOGY: GLOBAL 1 (2023).

PFAS toxicity and environmental longevity are sufficiently extreme to have prompted a rare public statement by over 350 scientists from 38 countries advocating the elimination of PFAS *as a class* from global production and use.<sup>9</sup>

Both DuPont and Chemours have publicly acknowledged that Fayetteville Works has discharged PFAS into the Cape Fear River for decades since the plant's 1980 construction.<sup>10</sup> But neither company has meaningfully redressed the staggering health and financial burdens they have imposed on affected communities. To the contrary: DuPont's creation of The Chemours Company, LLC is widely understood as the corporation's deliberate effort to externalize these troublesome costs. DuPont established Chemours in early 2015 as a wholly owned subsidiary, to hold DuPont's Performance Chemicals (*i.e.*, PFAS) business.<sup>11</sup> Chemours became independent later that same year,<sup>12</sup> and eventually took on "two-thirds of DuPont's environmental liabilities and 90% of DuPont's . . . environmental litigation [that was pending as of 2020]."<sup>13</sup>

DuPont's malign corporate restructuring vis-a-vis Chemours' creation has already been the subject of litigation between the two companies that resulted in DuPont agreeing to contribute to a joint escrow account that will hold up to **\$4 billion** to cover past and future PFAS-related expenses.<sup>14</sup> However, even this vast sum is manifestly insufficient to match the companies' PFAS liabilities, given that the U.S. alone has more than 2,800 sites of known PFAS contamination,<sup>15</sup> many of which implicate DuPont/Chemours facilities and chemical products. Indeed, separate litigation filed by Chemours shareholders against that company's directors describes how, even with respect to chemical pollution known to have been caused by Dupont/Chemours as of 2020, "respected financial analysts . . . stated that the Company's ultimate financial exposure could reach as high as \$5.5 to \$6 billion."<sup>16</sup> This figure does not contemplate potential increases in PFAS production, contamination, and associated liability.

Against this backdrop of community contamination and Chemours' financial precarity, residents of the lower Cape Fear River watershed were duly alarmed when, in October 2022,

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<sup>9</sup> Arlene Blum et al., *The Madrid Statement on Poly- and Perfluoroalkyl Substances (PFASs)*, 123 ENV'T. HEALTH PERSP. 5, A 107 (May 2015); *see also The Madrid Statement*, GREEN SCI. POLICY INST. (2023), <https://greensciencepolicy.org/our-work/science-policy/madrid-statement/> (describing the sign-on of scores of scientists beyond the original 250 since the original statement was issued, across nations now cumulating to 38).

<sup>10</sup> *Fighting PFAS Contamination In The Lower Cape Fear Region*, CLEAN CAPE FEAR, <https://www.cleancapefear.org/pfas-in-nc> (last visited Feb. 24, 2023). Expert testimony in pending litigation explains that PFAS have been and are released from Fayetteville Works and enter the environment in three ways: (1) wastewater or surface water runoff discharges directly into the Cape Fear River, through the plant's Outfall 002; (2) air emissions from the facility settle on land, leach into groundwater and surface water, and then enter the Cape Fear River; and (3) leakage from pipes, ponds, conveyances, and storage units enters the ground, migrates to groundwater, and enters the Cape Fear River. *Nix v. Chemours Co. FC LLC*, No. 7:17-cv-00189-D (E.D. N.C. S. Div., May 18, 2022), Ex. 8, § 7, ECF 336-8.

<sup>11</sup> Verified Compl. ¶ 9, *Cape Fear Pub. Util. Auth. v. EIDP, Inc.*, No. 2023-0363 (Del. Ch. Mar. 24, 2023).

<sup>12</sup> *Id.*

<sup>13</sup> Verified Stockholder Deriv. Compl. ¶ 4, *Lee v. Brown*, No. 1:20-cv-00989-UNA (D. Del. Jul. 27, 2020), ECF No. 1.

<sup>14</sup> Jef Feeley, et al., *DuPont, Chemours in \$4 Billion "Forever Chemicals" Cost Pact (2)*, Jan. 22, 2021, Bloomberg Law, <https://news.bloomberglaw.com/environment-and-energy/dupont-and-chemours-in-4-billion-forever-chemicals-cost-pact>.

<sup>15</sup> *Mapping the PFAS contamination crisis: New data show 2,858 sites in 50 states and two territories*, ENVTL. WORKING GRP. (updated Mar. 14, 2023), [https://www.ewg.org/interactive-maps/pfas\\_contamination/](https://www.ewg.org/interactive-maps/pfas_contamination/).

<sup>16</sup> *Lee v. Brown et al.*, *supra* n.13, at ¶ 9.

Chemours applied to North Carolina’s Department of Environmental Quality (DEQ) for an air permit to *expand* PFAS production at Fayetteville Works.<sup>17</sup> In one of the three areas proposed for modification,<sup>18</sup> Chemours proposes to install equipment to increase its production capacity by 100%.<sup>19</sup> In the second area, new equipment would increase capacity by 35 – 40%.<sup>20</sup> In the third, Chemours aims to increase capacity by 30%.<sup>21</sup> Chemours has acknowledged that as a result, “*actual emissions will increase.*”<sup>22</sup> Further, and of grave concern, Chemours’ application also states that emissions of known-toxic GenX (as well as other fluorochemicals) will increase.<sup>23</sup>

Today, in the lower Cape Fear River watershed, most households drink water contains unsafe levels of PFAS; children drink PFAS-contaminated water at many local schools; and neighbors regularly remark on the high prevalence of ailments causally linked to PFAS exposure. Yet neither DuPont nor Chemours has a plan for remediating decades of soil and groundwater contamination that, if left *in situ*, will impair community health and harm the environment for generations. Further, DuPont, Chemours, DEQ, and EPA have stymied residents’ ability to obtain basic data on the PFAS types and quantities to which they have been exposed; to participate in, and benefit from, desperately needed health studies to identify particular conditions attributable to the specific PFAS types produced at Fayetteville Works; and to obtain the medical monitoring and care necessary to maximize residents’ chance of a long and healthy life despite involuntary and sustained chemical exposure.

As a result, even the simplest tasks—turning on the kitchen tap, using a water fountain, taking a shower, or eating vegetables from a backyard garden—are shrouded in questions and fear.

Past, ongoing, and threatened further PFAS contamination in the lower Cape Fear River watershed, and Dupont/Chemours’ determination to evade responsibility for protecting and compensating those affected, has created a human rights crisis requiring immediate action. PFAS contamination of drinking water sources obstructs residents’ **right to healthy water**. This right is in turn integral to other human rights, including the **rights to life and health and a life with dignity**, and the **right to a clean and safe environment**. The resulting body burden of toxic chemicals found in area residents’ blood abridges their **right to bodily integrity**. DuPont/Chemours’ historic and continuing deception regarding PFAS releases, PFAS human health effects, and the environmental fate and transport of PFAS further violates residents’ **right to information**. Finally, DuPont/Chemours’ refusal to remediate all but a fraction of the harms they have caused, and their ongoing efforts to internalize profit and externalize risk, impairs local residents’ **right to access to justice and an effective remedy**. These basic human rights are set forth in international human rights covenants and declarations to which the United States is bound.

EPA and DEQ are also, through their regulatory timidity and enforcement half-measures, responsible for acquiescing in past and ongoing human rights violations. In some instances, they

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<sup>17</sup> Jeffrey Twaddle et al., *Air Permit Application: Vinyl Ethers Expansion and Hydrolysis Line* at 2, CHEMOURS CO. (Oct. 2022), available at <https://www.deq.nc.gov/air-quality/permits/public-communication/chemours-vinyl-ethers-expansion-permit-applicationfinalpublic-copypdf/download?attachment?attachment>.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

<sup>20</sup> *Id.* at 3.

<sup>21</sup> *Id.*

<sup>22</sup> *Id.* at 2.

<sup>23</sup> *Id.* at 6.

have committed affirmative violations of North Carolinians’ human rights, by rejecting specific civil society pleas—in the form of well-supported administrative petitions—to take specific legal actions to address the harms from PFAS. Here, government agencies appear to have bought into polluters’ narrative that “the issues associated with PFAS ha[ve] become ‘too big to regulate.’”<sup>24</sup>

Notwithstanding the devastation Cape Fear River residents have suffered and continue to suffer, *this region is no sacrifice zone*. The area is culturally vibrant, and boasts scenic beaches, ocean access, preserved wetlands, and enormous biodiversity. Wilmington, NC, was in 2022 the most moved-to city in the nation.<sup>25</sup> This population surge only adds to the urgency of environmental remediation. There remains a window within which to act to provide a meaningful quality of life for all in North Carolina. In the immediate term, regulators must prevent further harm by denying a permit for Fayetteville Works’ expansion. Chemours and DuPont must also remedy past contamination and cease present PFAS releases from Fayetteville Works, through full remediation of contaminated soil and groundwater, prevention of *any* further PFAS releases to air or water, and corporate accountability for paying these previously externalized costs.

Clean Cape Fear (CCF) is a volunteer organization comprising residents advocating for the health of their children, families, and community. CCF has prepared this communication with and through the UC Berkeley Environmental Law Clinic. CCF seeks your urgent assistance to address existing and future toxic threats, and thereby protect the community’s basic human rights. As the Special Rapporteur (SR) whose mandate centers toxic contamination, you have in prior communications explicated relevant environmental human rights and the obligations they create for the United States. Now, we ask you to apply these rights and obligations to the Cape Fear River crisis. As your past communications have emphasized, PFAS present a global contamination threat. Your response to Cape Fear’s PFAS crisis can therefore be a model for other affected communities. This communication details the factual circumstances of the crisis in the lower Cape Fear River watershed, and analyzes both private actors’ violations of legal rights, and public actors’ acquiescence in these violations through insufficient regulation, enforcement, and community engagement, as well as their affirmative violation of human rights. It then proposes specific ways the SR’s office can assist.

## LEGAL ANALYSIS

DuPont’s and Chemours’ actions in exposing entire communities to PFAS violates human rights long recognized in international law. By contaminating drinking water, air, soil, and local food supplies with PFAS; by causing pervasive human exposure to PFAS through multiple routes; and by toxifying the broader ecosystem, DuPont and Chemours have violated the human right to clean water and a sustainable environment, the right to bodily integrity, the right to life and health, the right to information, and the right to access to justice and an effective remedy. As a signatory to relevant international instruments, the United States is legally obligated to protect these rights. Further, putative regulators North Carolina DEQ and the federal EPA have been complicit in these

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<sup>24</sup> *Hardwick v. 3M Co.*, No. 2:18-CV-1185 (S.D. Ohio), First Amended Class Action Complaint and Jury Demand, ¶ 62 (filed Apr. 16, 2019).

<sup>25</sup> Simone Jasper, *People Flocked to this North Carolina City in 2022. So much so, it topped national list*, THE NEWS & OBSERVER (Jan. 4, 2023) <https://www.newsobserver.com/news/state/north-carolina/article270749332.html>.

rights violations, because the duty to protect citizens from toxic exposures, regardless of their source, is “a fundamental obligation that rests with the State.”<sup>26</sup>

CCF offers one further note as to terminology. Although EPA is only now proposing to designate certain PFAS as “hazardous substances” under U.S. law,<sup>27</sup> the United Nations has impliedly reached the commonsense conclusion that PFAS chemicals are “hazardous substances” within the mandate of the SR on Toxics and Human Rights. This understanding is evidenced in SR’s 2021 fact-finding visit to the PFAS-exposed community of Veneto, Italy, and the inclusion of that PFAS crisis in the 2022 country report on Italy.<sup>28</sup> CCF accordingly describes PFAS as “hazardous substances” below.

### **The Right to Clean, Healthy Water**

*“No parent should have to worry about what water their children are drinking at school. No student should have to worry if the water they are drinking at school will give them cancer.”<sup>29</sup>*

- Emily Donovan, parent and co-founder, Clean Cape Fear

#### **A. Nature of the Right**

The right to water is recognized as a right subsidiary to and necessary for other human rights, including the right to a healthy environment and the right to life.<sup>30</sup> Although the right to

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<sup>26</sup> Marcos A. Orellana, *Visit to Italy: Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes*, U.N. HUMAN RIGHTS COUNCIL, A/HRC/51/35/Add. 2 (July 13, 2022), at 3.

<sup>27</sup> See, e.g., EPA, Advanced Notice of Proposed Rulemaking: Addressing PFAS in the Environment, 88 Fed. Reg. 22399 (Apr. 13, 2023) (seeking public input and data regarding “hazardous substance” designation for several PFAS or PFAS categories under the Comprehensive Environmental Response, Compensation, and Liability Act.

<sup>28</sup> Marcos A. Orellana, *Visit to Italy*, *supra* n. 26.

<sup>29</sup> Andrew James, *Parents ‘plea’ to Brunswick Co. school leaders to assure safe water*, WWAY-TV3 (Sept. 19, 2017), <https://www.wwaytv3.com/parents-plea-to-brunswick-co-school-leaders-to-assure-safe-water/>.

<sup>30</sup> The UN recognized the right to water and sanitation for the first time in Resolution 64/292 in July 2010, following years of advocacy for clean water and prior resolutions related to safe water. *Id.* at 1-2. This resolution calls upon states to “provide financial resources” and “capacity building” to “scale up efforts to provide safe, clean, accessible, and affordable drinking water and sanitation for all.” *Id.* at 3.



water is explicitly recognized in some treaties,<sup>31</sup> a state's duty to provide clean water has been part of its human rights obligations for decades.<sup>32</sup>

Many international mechanisms recognize the right to water as a basic human right and as a “fundamental precondition for the enjoyment of other rights.”<sup>33</sup> Multiple treaties foundational to international human rights law recognize the right to water. The United States is a party to the International Covenant on Civil and Political Rights (ICCPR), and is bound to fulfill ICCPR's obligations, which include the right to life.<sup>34</sup> The ICCPR's committee body, the Human Rights Committee (HRC), instructs that state parties, including the U.S., are legally bound to provide things that are vital to life—including water.<sup>35</sup>

Similarly, under the authority of the International Covenant for Economic, Social, and Cultural Rights (ICESCR), the Committee on Economic, Social, and Cultural Rights (CESCR) in 1995 recognized the right to water as a basic human right.<sup>36</sup> In 2002, CESCR identified water as a human right *and* as a “prerequisite for the realization of other human rights.”<sup>37</sup> CESCR also stated that because life depends on water, the right to water should be viewed in relation to rights like the

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<sup>31</sup> See Convention on the Elimination of All Forms of Discrimination Against Women (Art. 14, ¶ 2 (h)); Convention on the Rights of the Child (Art. 24, ¶ 2 (c)); Geneva Convention relative to the Treatment of Prisoners of War of 1949 (Art. 20, 26, 29, and 46); Geneva Convention relative to the Treatment of Civilian Persons in Time of War of 1949 (Art. 85, 89, and 127); Mar Del Plata Action Plan of the United Nations Water Conference; Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992 (A/CONF.151/26/Rev.1 (Vol. I and Vol. I/Corr.1, Vol. II, Vol. III and Vol. III/Corr.1)) (United Nations publication, Sales No. E.93.I.8) (¶18.47 of Agenda 21); The Dublin Statement on Water and Sustainable Development, International Conference on Water and the Environment (A/CONF.151/PC/112) (Principle No. 3); recommendation (2001) 14 of the Committee of Ministers to Member States on the European Charter on Water Resources, ¶¶ 5 and 19; resolution 2002/6 of the United Nations Sub-Commission on the Promotion and Protection of Human Rights on the promotion of the realization of the right to drinking water. See also Special Rapporteur of the Sub-Commission on the right to drinking water supply and sanitation, addressing the realization of the right to drinking water in conjunction with economic, social, and cultural rights (E/CN.4/Sub.2/2002/10).

<sup>32</sup> At the 1977 U.N. Water Conference in Mar del Plata, for example, Argentina developed an action plan asserting all people have the right to drinking water. Mar Del Plata Action Plan of the United Nations Water Conference. The U.N. Conference on Environment and Development in 1992 confirmed this basic human right in Agenda 21. Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992 (A/CONF.151/26/Rev.1 (Vol. I and Vol. I/Corr.1, Vol. II, Vol. III and Vol. III/Corr.1)) (U.N. publication, Sales No. E.93.I.8) (¶18.47 of Agenda 21).

<sup>33</sup> Office of U.N. High Commissioner for Human Rights (OHCHR), *Fact Sheet No. 35: The Right to Water*, August 2010, No. 35, page 10.

<sup>34</sup> U.N. General Assembly, *International Covenant on Civil and Political Rights*, 16 Dec. 1966 (Art.6(1): “Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life.”).

<sup>35</sup> *Id.*

<sup>36</sup> U.N. Committee on Economic, Social, and Cultural Rights (CESCR), *General Comment No. 6: The Economic, Social, and Cultural Rights of Older Persons*, UN Doc. E/1996/22 (Dec. 1995) (in ¶¶ 5 and 32, CESCR describes “adequate food, water, shelter, clothing and health care” as “basic rights” to which older persons should have access.)

<sup>37</sup> *Id.*, *General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)*, 20 Jan. 2003, E/C.12/2002/11, at 1. Specifically, the Committee stated that the right to water, as “one of the most fundamental conditions for survival,” is “indispensable” to realize the right to an adequate standard of living—including the right to adequate housing (U.N. General Assembly, *International Covenant on Economic, Social and Cultural Rights*, 16 Dec. 1966, U.N. Treaty Series, vol. 993, Art. 11, ¶ 1) and the right to the highest attainable standard of health (ICESCR, Art. 12, ¶ 1). U.N. General Assembly, *International Covenant on Economic, Social and Cultural Rights*, 16 Dec. 1966, U.N. Treaty Series, vol. 993, Art. 11, ¶ 3.

right to life, health, and human dignity.<sup>38</sup> CESCR gave tangible guidance as to standards: the water “must be *adequate* for human dignity, life and health,” and available for future generations.<sup>39</sup> The factors vital to adequate water are availability, quality, and accessibility (accessibility being physical, economical, non-discriminate, and informed).<sup>40</sup> Accordingly, CESCR requires that states “have to adopt effective measures to realize, without discrimination, the right to water.”<sup>41</sup> Although the United States is not a party to ICESCR, and is not required to fulfill its particular obligations, it has signed the treaty and is thus bound not to counter the treaty’s main purpose. Because water is essential to core rights such as the right to life, U.S. denial of clean water to its populace runs counter to ICESCR’s main purpose.

The U.S. is also obligated to protect North Carolinians’ right to toxics-free water because of its status as a signatory to the Stockholm Convention on Persistent Organic Pollutants and Chemicals and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, even though neither has been ratified by Congress. The Stockholm Convention aims to “protect human health and the environment from persistent organic pollutants.”<sup>42</sup> The specific chemicals listed under Annex A (chemicals to be eliminated) include PFOA, and those listed under Annex B (chemicals to be heavily regulated and reduced) include PFOS. Both PFAS listings include the regulation of the specific chemical compound named, its salts, and related compounds.<sup>43</sup> Further, limited exemptions for these chemicals’ production and use do not exempt manufacturers from ensuring safe chemical disposal and cleanup.<sup>44</sup>

The Basel Convention also sets forth appropriate measures that signatories must take to “ensure that the generation of hazardous wastes and other wastes within it is reduced to a minimum, taking into account social, technological, and economic aspects.”<sup>45</sup> Irrespective of these conventions’ status as U.S. domestic law, the U.S. is obligated as a signatory to act “in good faith to ensure that nothing is done that would defeat the object and purpose of the international instrument[s], pending a decision on ratification.”<sup>46</sup>

## B. Evidence of Violation

### 1. *DuPont/Chemours*

For 40-plus years, DuPont and later Chemours have released thousands of tons of PFAS from Fayetteville Works into the local environment, through both air emissions and discharges of

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<sup>38</sup> UN Committee on Economic, Social, and Cultural Rights (CESCR), *General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)*, 20 January 2003, E/C.12/2002/11, page 1.

<sup>39</sup> *Id.*, ¶ 11.

<sup>40</sup> *Id.*, ¶ 12.

<sup>41</sup> *Id.*, ¶ 1.

<sup>42</sup> *Stockholm Convention on Persistent Organic Compounds (POPs): Text and Annexes, Revised in 2019*, UN Doc. UNEP/POPs/CONF/4, App. II (2001), Art. 1, reprinted in 40 ILM 532 (2001).

<sup>43</sup> *Id.*

<sup>44</sup> *Id.*

<sup>45</sup> Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Art. 4 (“General Obligation”), <https://digitalcommons.pace.edu/cgi/viewcontent.cgi?article=1269&context=pilr>.

<sup>46</sup> Special Rapporteur on Toxics and Human Rights, Communication AL USA 6/2015, at 7 (May 11, 2015) (discussing obligations of the United States as a signatory but nonratifying party to international treaties).

process waste water to the Cape Fear River.<sup>47</sup> These toxics have made Cape Fear River water unsafe to drink for 100 river miles.<sup>48</sup> This river supplies water to residents of three North Carolina counties (New Hanover, Brunswick, and Pender) in their homes, schools, offices, parks, playgrounds, and places of worship. This tap water is also used to grow local crops and backyard gardens, and to fill swimming pools.

PFAS air emissions from the facility, which land on soil and then migrate to groundwater, have additionally spread to private drinking water wells in a more than 10-mile radius from their point of manufacture.<sup>49</sup> Although it is impossible to state precisely how many residents of the lower Cape Fear River watershed have for years or decades been drinking PFAS-contaminated water, the number of affected municipal-water and well-water users is more than a half-million.<sup>50</sup> PFAS from Fayetteville Works also threaten food supplies locally and beyond, as these chemicals are taken up in commercial crops, backyard produce, and farm animals, including the hogs processed at the vast local slaughterhouse.

Neither DuPont nor Chemours have voluntarily assumed responsibility for redressing this pervasive violation of the human right to water. Rather, they have acted only late, partially, and reluctantly where public and private-party lawsuits have forced their hand. The meaningful but still-inadequate remedies achieved through litigation are described below, to illuminate the safety gap still requiring urgent attention.

a. DuPont/Chemours contamination of public water supplies

Several public water authorities use the Cape Fear River to supply drinking water to area residents, including residents of Brunswick County, Pender County, parts of New Hanover County, and the residents of the City of Wilmington (population > 117,000). Litigation by one of these entities, the Cape Fear Public Utility Authority (CPFUA), provides insight into the scale of costs that DuPont/Chemours has externalized, as well as the labor required to address PFAS pollution in water pipes and at the tap, rather than at the source.

In 2017, CPFUA sued DuPont and Chemours in federal district court to recover past, present, and future costs necessary to address and remove PFAS from its public drinking water supply, and to seek punitive damages for the companies' "willful or wanton conduct . . . with conscious disregard of and indifference to the rights and safety of others."<sup>51</sup> In a subsequent, still-pending suit, CPFUA sued DuPont and Chemours in Delaware state court to challenge "defendants' restructuring efforts [that] seek to leave plaintiff and others harmed by PFAS holding the bag."<sup>52</sup> Among remedies the utility seeks in that suit is the ability to avoid what it describes as fraudulent shuffling of assets and liabilities between DuPont and Chemours to minimize payouts

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<sup>47</sup> *Nix v. Chemours Co. FC LLC*, *supra* n.10, Ex. 8, § 171.

<sup>48</sup> *Id.*

<sup>49</sup> *Id.* at Ex. 8, § 8.

<sup>50</sup> See 2022 Annual Report, CAPE FEAR PUB. UTIL. AUTH. (2022), <https://perma.cc/KY3P-59F2> (stating that the utility serves 200,000 people); *Frequently Asked Questions: Water Treatment Upgrades and Rates*, BRUNSWICK CNTY. GOV'T (2023), <https://perma.cc/U6GQ-2KJN> (stating that the utility serves over 300,000 people).

<sup>51</sup> Complaint at ¶ 118, *Cape Fear Pub. Util. Auth. v. Chemours Co., et al.*, No. 7:17-cv-00195-D (E.D.N.C. Oct. 16, 2017), ECF No. 1.

<sup>52</sup> *Cape Fear Pub. Util. Auth. v. EIDP, Inc.*, *supra* n. 11, Verified Compl. at 20.

to those harmed by PFAS.<sup>53</sup> Direct harms to CFPUA include the more than \$64 million it has had to expend to add state-of-the-art PFAS treatment technology and operate its water treatment system in a manner that will protect the public from toxic exposures.<sup>54</sup>

Further, CFPUA is the only local utility that, as of February 2023, has adequate PFAS treatment infrastructure in place and operating, at the Sweeney Water Treatment Plant in Wilmington.<sup>55</sup> This means customers in other areas will continue to receive PFAS-contaminated water until their utilities can complete multi-million-dollar upgrades. In Brunswick County, for example, the water authority is still preparing reverse osmosis filters to go on line at the Northwest Water Treatment Plant, aiming to operate by 2024. Chemours is not paying these costs, either.<sup>56</sup>



Workers ready Brunswick County's  
Northwest Treatment Plan  
to filter out PFAS (March 2023)  
*Photo: UC Berkeley Environmental Law Clinic*

In the time until adequate utility-scale treatment is installed, those reliant on public water systems must self-protect by buying bottled water or installing a home filtration system as an interim measure. Expensive as bottled water is, home filtration adequate to address PFAS is even more costly. Filtration processes typical in standard counter-top or under-sink filters cannot completely remove PFAS.<sup>57</sup> This instead requires specialized filtration processes, with state-of-the-art filters using reverse osmosis (RO).<sup>58</sup> A single RO filter can cost a household hundreds of

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<sup>53</sup> *Id.* at 31 and *passim*.

<sup>54</sup> *Id.* at ¶ 30.

<sup>55</sup> Mara McJilton, *Construction complete for new filters at water treatment plant in Wilmington*, WECT NEWS 6 (Feb. 10, 2023), <https://www.wect.com/2023/02/10/construction-complete-new-filters-are-water-treatment-plant-wilmington/>.

<sup>56</sup> *Northwest Water Treatment Plant Expansion & Reverse Osmosis Treatment Upgrades*, BRUNSWICK CNTY. GOV'T, <https://www.brunswickcountync.gov/nwtp/> (2023).

<sup>57</sup> *Not All In-Home Drinking Water Filters Completely Remove Toxic PFAS*, NICHOLAS SCHOOL OF THE ENV'T AT DUKE UNIV. (Feb. 5, 2020), <https://nicholas.duke.edu/news/not-all-home-drinking-water-filters-completely-remove-toxic-pfas>.

<sup>58</sup> See Sandee LaMotte, *How to reduce PFAS in your drinking water, according to experts*, CNN HEALTH (Mar. 14, 2023), <https://www.cnn.com/2023/03/14/health/pfas-water-filters-wellness/index.html>.

dollars,<sup>59</sup> and several parts must be replaced every 6-24 months at substantial additional cost.<sup>60</sup> Thus, adequate home filtration is not financially attainable for many residents, in violation of the human rights principle that clean drinking water must be economically accessible.

b. DuPont/Chemours contamination of private wells

Water contamination attributable to Fayetteville Works does not stop with public water systems: more than 6,000 households reliant on private wells for drinking water have also been impacted by DuPont/Chemours PFAS.<sup>61</sup> Additional litigation against Chemours has accordingly been required to address the near-impossible remediation challenge posed by PFAS contamination of well water. In 2017, the North Carolina Department of Environmental Quality (DEQ) sued Chemours in state trial court for violating state water quality law through discharge of PFAS-containing effluent.<sup>62</sup> After considerable litigation and settlement discussion in which plaintiff-intervenor Cape Fear River Watch also actively participated, the court in 2019 issued a Consent Order meant to mitigate future PFAS exposures to affected well owners.<sup>63</sup>

With respect to provision of potable drinking water, the Consent Order required Chemours to fund a combination of public-water hook-ups, whole building filtration systems, and under-sink RO systems to affected well owners. Chemours was also required to supply bottled water immediately, to bridge the drinking-water safety gap until long-term measures were operable.<sup>64</sup> Well-owner eligibility for these interim and permanent solutions was to be based on the type and concentrations of PFAS detected through the Consent Order's well-testing protocol.<sup>65</sup> Although the Consent Order has meaningfully improved conditions, its substantive limitations—especially when combined with Chemours' consistent obstruction of the Order's full implementation—mean that well owners' right to water is still severely compromised. Among limitations in the Consent Order, and problems with its implementation, are:

- It only addresses a small subset of the 300+ PFAS released from Fayetteville Works. Chemours will not pay to test wells for additional PFAS, or to remediate any contamination from PFAS not specified in the Consent Order.

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<sup>59</sup> Scott Winfeld, *4 Best PFAS Water Filters: Reverse Osmosis, Berkey, & More*, WATERDEFENSE (Jan. 17 2023), <https://waterdefense.org/water-filter/reviews/best-pfas-filters/>

<sup>60</sup> See, e.g., AquaTrue Reverse Osmosis Water System (retail price \$449), [https://waterandwellness.com/products/aquatru?sscid=41k7\\_oe8ri&](https://waterandwellness.com/products/aquatru?sscid=41k7_oe8ri&); see also

*Reverse Osmosis Maintenance*, ESP WATER PRODS. (2023), <https://www.espwaterproducts.com/reverse-osmosis-maintenance/>; *Replacements by System Brand and Model*, ESP WATER PRODS. (2023).

<sup>61</sup> *DEQ Well Sampling Results (Lower Cape Fear Region) through September 2022*, N.C. DEP'T OF ENVTL. QUALITY (Oct. 10, 2022), <https://www.deq.nc.gov/well-sampling-results-lower-cape-fear-region-through-september-2022/open>; *DEQ Well Sampling Results (Fayetteville Region) through September 2022*, N.C. DEP'T OF ENVTL. QUALITY (Oct. 10, 2022), <https://www.deq.nc.gov/well-sampling-results-fayetteville-region-through-september-2022/open>.

<sup>62</sup> Consent Order, *N.C. v. Chemours Co. FC, LLC* (Bladen Cnty. Feb. 25, 2019).

<sup>63</sup> *Id.*

<sup>64</sup> Alan Wooten, *Chemours for the third time this year cited for being out of compliance*, BLADEN J. (Aug. 30, 2021), <https://www.bladenjournal.com/news/39217/chemours-for-third-time-this-year-cited-for-being-out-of-compliance>; Consent Order, §§ 19-20, 23, *N.C. v. Chemours Co. FC, LLC*, *supra* n. 62, ¶¶ 19-20.

<sup>65</sup> Consent Order, ¶ 23, *N.C. v. Chemours Co. FC, LLC*, *supra* n.62.

- It does not specify a minimum quantity of water that Chemours must supply per household resident while households await installation of more permanent drinking water solutions. Residents have complained that the quantity of water Chemours provides is insufficient for household residents,<sup>66</sup> violating the human right to adequate water.
- Although the Consent Order contemplates that the PFAS concentration levels triggering Chemours' remedial obligations may decrease to reflect promulgation of more stringent health advisory levels or regulatory standards, it does not estop Chemours from challenging regulators' attempts to establish new levels or standards. Thus, when DEQ lowered the advisory level for PFAS in drinking water to match new EPA guidance, and this made 1,700 more residents eligible for Consent Order remedies,<sup>67</sup> Chemours' response was not to step up its remedial efforts. Instead, it filed a lawsuit challenging EPA's guidance.<sup>68</sup>
- The water filtration to which many polluted-well owners are entitled consists only of under-sink filters. Bath and shower water is impliedly to go untreated, even though dermal contact and inhalation (*e.g.*, of warm water vapor) are also known routes of PFAS exposure.<sup>69</sup>
- Although the Consent Order provides that private well-owners are entitled to have Chemours provide testing services, residents report that Chemours' well-testing contractor has been unwilling to test their wells.<sup>70</sup>
- Wells that are used solely for farm animals' drinking water or irrigation may be ineligible for free PFAS testing.<sup>71</sup>

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<sup>66</sup> Lisa Sorg, *At emotional committee hearing over PFAS bill, lawmakers and concerned citizens confront Chemours, business interests*, N.C. POLICY WATCH (Jun. 3, 2022), <https://ncpolicywatch.com/2022/06/03/at-emotional-committee-hearing-over-pfas-bill-lawmakers-and-concerned-citizens-confront-chemours-business-interests/>.

<sup>67</sup> Ben Sessoms, *New EPA standards: PFAS too high in 1,700 more Cumberland wells*, CAROLINA PUB. PRESS (Jun. 21, 2022), <https://carolinapublicpress.org/54867/new-epa-standards-pfas-too-high-in-1700-more-cumberland-wells/>.

<sup>68</sup> See Petition for Review, *Chemours Co. FC, LLC v. United States EPA*, No. 22-2287 (3d Cir. Jul. 13, 2022), ECF 1-1.

<sup>69</sup> *Questions and Answers: Drinking Water Health Advisories for PFOA, PFOS, GenX Chemicals & PFBS*, U.S. EPA (Mar. 14, 2023), <https://www.epa.gov/sdwa/questions-and-answers-drinking-water-health-advisories-pfoa-pfos-genx-chemicals-and-pfbs>.

<sup>70</sup> Trista Talton, *PFAS Testing: 1,000 homes qualify for filtration tap, so far*, COASTAL REV. (Mar. 3, 2023), <https://coastalreview.org/2023/03/pfas-testing-1000-homes-qualify-for-filtration-or-tap-so-far/> (describing resident complaints at March 2023 public information session in Pender County, NC).

<sup>71</sup> *Id.*



Owners of contaminated wells near Fayetteville Works make banners and lawn signs to memorialize farm animals and pets who drank contaminated water and later died from PFAS-related conditions (March 2023)

*Photo: UC Berkeley Environmental Law Clinic*

For these reasons, many well owners' right to clean, safe, and sufficient water remains illusory. The 2019 Consent Order has accordingly been subject to continual modification and expansion to address later-discovered PFAS pollution sites, including well contamination in Brunswick, Pender, New Hanover, and Columbus counties<sup>72</sup>; Chemours' violations of the Consent Order<sup>73</sup>; and contamination concerns related to Chemours' ongoing PFAS emissions.<sup>74</sup>

## 2. EPA

In a recent action that reflects the true health hazards of drinking PFAS-contaminated water, EPA in March 2023 proposed for the first time stringent, enforceable federal drinking water

<sup>72</sup> See DEQ, *Well Sampling Information for Lower Cape Fear Area Residents*, <https://www.deq.nc.gov/news/key-issues/genx-investigation/well-sampling-information-lower-cape-fear-area-residents> (describing expansion of well monitoring requirements under Consent Order to include additional areas found to be contaminated); Matthew Prensky, *What We've Learned So Far After a Year of PFAS Well Testing Around Wilmington*, Wilmington StarNews online (Feb. 21, 2023), <https://www.starnewsonline.com/story/news/local/2023/02/21/genx-water-crisis-what-well-testing-is-telling-us-about-pfas/69884135007/> (stating that "some 719 drinking water wells . . . tested positive for PFAS contamination [by November 2022] across New Hanover, Brunswick, Pender and Columbus counties, according to Chemours' monthly update to the North Carolina Department of Environmental Quality.").

<sup>73</sup> DEQ, *[Summary of] Chemours Consent Order*, <https://www.deq.nc.gov/news/key-issues/genx-investigation/chemours-consent-order#> (describing amendments to Consent Order, and enforcement history).

<sup>74</sup> Lisa Sorg, *Breaking: New Analysis Indicates that Toxics Were Present in Wilmington Drinking Water at Extreme Levels*, NC Newsline (Oct. 9, 2019), <https://ncnewsline.com/briefs/breaking-new-analysis-indicates-that-toxics-were-present-in-wilmington-drinking-water-at-extreme-levels/#sthash.zypYxJAF.dpbs> (describing ongoing emissions from Fayetteville Works).

standards (“maximum contaminant levels” under the Safe Drinking Water Act) for six PFAS.<sup>75</sup> Specifically, EPA announced its intent to limit PFOS and PFOA to four parts per trillion, and PFNA, PFHxS, PFBS, and GenX chemicals to levels that, when combined, “pose a potential risk” to human health.<sup>76</sup>

These standards are essential, and long overdue. CCF’s leadership applauds them, and indeed, participated in their recent formal unveiling in Wilmington, North Carolina.<sup>77</sup> For this reason, *as long as EPA vigorously defends these standards against certain industry opposition*, the agency will be fulfilling an important aspect of its duties with respect to protecting the right to drinking water nationwide. Nevertheless, there remains urgent work for EPA (and DEQ) to ensure safe drinking water for all residents in the lower Cape Fear River watershed *now*, because it will take years for any new federal drinking water standards to be finalized, litigated, operationalized, and enforced, and thus effectual at the tap. Further, EPA’s proposed drinking water standards do not address dozens of PFAS chemicals produced at Fayetteville Works, including the ultra-short-chain PFAS (i.e., those with fewer than 6 carbon atoms) that are now the most commercially relevant suite in the chemical class.<sup>78</sup> Indeed, these newer PFAS are not even captured in EPA’s most recent rule regarding *monitoring* for still-unregulated chemicals.<sup>79</sup>

Further, because local PFAS concerns extend beyond the availability of clean drinking water, EPA must supplement its use of the Safe Drinking Water Act with its use of other legal authorities for toxics reduction to address North Carolina’s contamination crisis, as described below.

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<sup>75</sup> EPA Press Office, *Biden-Harris Administration Proposes First-Ever National Standard to Protect Communities from PFAS in Drinking Water*, EPA (Mar. 14, 2023), <https://www.epa.gov/newsreleases/biden-harris-administration-proposes-first-ever-national-standard-protect-communities>; *PFAS National Primary Drinking Water Regulation Rulemaking*, 88 Fed. Reg. 18,638 (Mar. 29, 2023); Jen Christensen, *EPA proposes first standards to make drinking water safer from ‘forever chemicals’*, CNN (Mar. 15, 2023), <https://www.cnn.com/2023/03/14/health/epa-pfas-standards-wellness/index.html>.

<sup>76</sup> *Id.*

<sup>77</sup> *EPA Announces Latest Action to Address PFAS in Drinking Water*, U.S. EPA (Mar. 14, 2023), <https://www.youtube.com/watch?v=JuTu7MFmMnY>.

<sup>78</sup> Mohamed Ateia, et al., *The Overlooked Short- and Ultrashort-Chain Poly- and Perfluorinated Substances: A Review*, 220 CHEMOSPHERE 866, 866 (Apr. 2019) (describing a major industry shift towards shorter-chain, still-unregulated PFAS).

<sup>79</sup> Katherine E. Pelch, et al., *70 Analyte PFAS Test Method Highlights Need for Expanded Testing of PFAS in Drinking Water*, 876 SCIENCE OF THE TOTAL ENVIRONMENT 162978, at 1 (June 10, 2023), <https://www.sciencedirect.com/science/article/pii/S0048969723015966?via%3Dihub> (describing types (“analytes”) of PFAS that would not be captured even by EPA’s forthcoming, most-expansive-yet Unregulated Contaminants Monitoring Rule, leading to underreporting of overall PFAS loads in drinking water); *see also* Trista Talton, *Half of All PFAS in Drinking Water Not Monitored by EPA*, CoastalReview.org (Apr. 14, 2013), <https://coastalreview.org/2023/04/half-of-pfas-in-drinking-water-not-monitored-by-epa-study/?fbclid=IwAR1qgljmKpoaSNztyV3Zo7MOxkLwLjZumc8ZY78SdTDQw5Aux4O6-9Wdg> (describing implications of Pelch, et al. findings).



## *The Right to Bodily Integrity*

*“[T]hese chemicals are in everybody’s blood. The victims [. . .] are all of us.”*

- Robert Bilott, Esq.<sup>80</sup>

### A. Nature of the Right

The preservation of bodily integrity is key to ensuring personal dignity and autonomy. The United Nations has thus recognized that “control of what happens to one’s own body [] is fundamental to human rights law, particularly to the right to life with dignity, which is interrelated with bodily integrity.”<sup>81</sup> Countries are bound to reinforce this right.<sup>82</sup>

International institutions, including Special Procedures, focus especially on implications of toxic exposures for the rights of children.<sup>83</sup> As stated in a 2019 report by the SR on Toxics, “[m]illions of children are deprived their right to maximum development by exposure to hazardous substances before they can even begin to exercise their fundamental right to be heard.”<sup>84</sup> The SR further described the dangers that toxics pose to healthy reproduction, describing “the phenomenon of children being born ‘pre-polluted,’” and the corresponding need for nations to protect the bodily integrity of women of reproductive age.<sup>85</sup>

PFAS exposures that begin in utero and continue in infancy intrude on the most intimate biological relationship, as PFAS moves from mother to child through the placenta, and then again through human milk.<sup>86</sup> Indeed, studies have shown that children who are exclusively fed breastmilk often have PFAS levels exceeding those of their mothers.<sup>87</sup> Such “pre-pollution” violates children’s and parents’ right to bodily control. In describing PFAS contamination in Italy, the SR on Toxics emphasized the additional emotional devastation that can accompany mother-to-child transmission of toxic chemicals, quoting an Italian mother who asked during an SR country visit, “Can you imagine what it means for a mother to realize she has poisoned her children through breast milk?”<sup>88</sup> North Carolina mothers likewise fear that their own bodies will betray them.

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<sup>80</sup> Robert Bilott, *Exposure: Poisoned Water, Corporate Greed, and One Lawyer’s Twenty-Year Battle Against DuPont* (2019), at 369.

<sup>81</sup> U.N. General Assembly, *Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes*, A/74/480 (2019), at 8/24.

<sup>82</sup> *Id.* at 8/24 n.18.

<sup>83</sup> See U.N. Resolutions A/73/567, A/HRC/39/48, and A/HRC/33/4.

<sup>84</sup> U.N. General Assembly, A/74/480, *supra* n.81, at 12/24.

<sup>85</sup> *Id.*, 12/24; see also U.N. General Assembly, *Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes: “The Silent Pandemic,”* A/HRC/33/41, 3, 7 (Aug. 2, 2016).

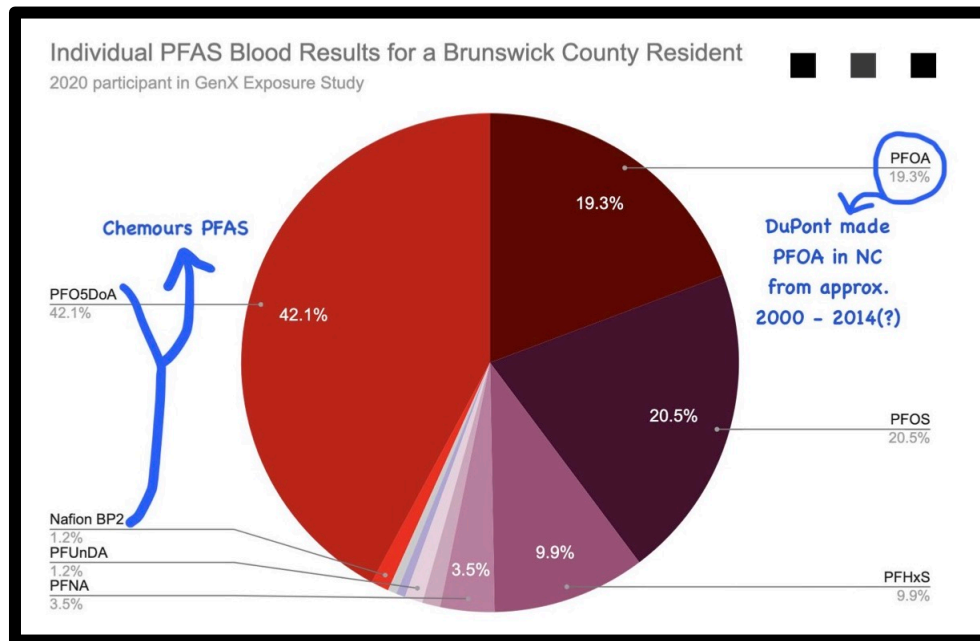
<sup>86</sup> *Breastfeeding may expose infants to toxic chemicals*, HARVARD T.H. CHAN SCHOOL OF PUB. HEALTH (Aug. 20, 2015), <https://www.hsph.harvard.edu/news/press-releases/breastfeeding-may-expose-infants-to-toxic-chemicals/>.

<sup>87</sup> *Id.*

<sup>88</sup> Special Procedures Statements, *End-of-visit statement by the United Nations Special Rapporteur on toxics and human rights, Marcos A. Orellana on his visit to Italy, 30 November to 13 December 2021* (Dec. 13, 2021).

## B. Evidence of Violation

Although PFAS are now detectable in 99% of U.S. residents, they exist at particularly concerning levels in the bodies of those in the lower Cape Fear River watershed. These residents' unconsenting and unrelenting exposure to PFAS from Fayetteville Works is thus a particularly egregious violation of the right to bodily integrity.



Biomonitoring of a Brunswick County mother revealed that over 65% of the meteoric levels of PFAS in her blood were from chemicals formerly or currently produced at Fayetteville Works.

*Source: Clean Cape Fear*

### 1. *DuPont/Chemours*

Results of biomonitoring studies in the lower Cape Fear River watershed have both informed and alarmed the community, and have consistently implicated Chemours' Fayetteville Works. In one study, 97% of local participants tested positive for PFAS at levels higher than the national average.<sup>89</sup> Twenty percent of people living in or near Wilmington had the "highest likelihood of adverse health effects related to PFAS," as compared to people living farther away.<sup>90</sup> Further, certain PFAS specific to Fayetteville Works have lengthy residence times in the human

<sup>89</sup> Dylan J. Wallis et. Al, *Source apportionment of serum PFASs in two highly exposed communities*, SCIENCE OF THE TOTAL ENVIRONMENT, <https://www.sciencedirect.com/science/article/pii/S0048969722059411> (Jan. 10, 2023).

<sup>90</sup> Sydney Bouchelle, *Study reveals Cape Fear Area residents have higher PFAS levels in blood than national average*, WWAY, <https://www.wwaytv3.com/study-reveals-cape-fear-area-residents-have-higher-pfas-levels-in-blood-than-national-average/> (December 7, 2022).

body: another study from the Cape Fear River area found that months after the plant had ceased discharge of certain PFAS, the blood of 99% of adults and 100% of children studied still contained them.<sup>91</sup> Chemours has thus grossly violated residents' right to bodily integrity.

Chemours' proposed expansion of PFAS production and associated increase in emissions would further exacerbate these rights violations. As the Toxics SR has stated: "[I]ndividuals should be able to choose what risks (i.e. with regard to exposure) they believe to be acceptable regarding their health, not the State or business enterprises."<sup>92</sup> With respect to PFAS, residents' choice is clear: *Not one more drop!*

## 2. EPA

EPA's failure to pursue essential biomonitoring data about the entry of PFAS into area residents' bodies constitutes acquiescence in Chemours' violations of North Carolinians' right to bodily integrity. Further, and more disturbing, EPA has recently committed an affirmative violation of this right. EPA in December 2021 *rejected* the portion of a petition filed by CCF and other civil society groups under the Toxic Substances Control Act (TSCA) that urged EPA to conduct *longitudinal biomonitoring of the workers at Fayetteville Works* at Chemours' expense.<sup>93</sup>

Worker exposure to PFAS at Fayetteville Works has been the subject of protest and local mobilization since the 2000s, when the United Steelworkers (USW) union "[i]n a seemingly unusual maneuver for labor . . . forged a partnership with already engaged environmental groups to demand corporate disclosure of information relevant to the C8 [i.e., PFOA] controversy."<sup>94</sup> USW's concern was founded in data showing that workers exposed to PFAS at six DuPont plants "exhibited some of the highest levels of exposure on record."<sup>95</sup>

As explained by TSCA petitioners, biomonitoring data from workers exposed to Fayetteville Works PFAS, when combined with requested experimental data lab studies on rodents, would fill essential data gaps that cannot be filled by animal studies alone.<sup>96</sup> It would thus help inform PFAS risk management actions in the lower Cape Fear River watershed and beyond.<sup>97</sup> EPA's rejection of the worker-biomonitoring ask in the TSCA petition, and the agency's defense of this position in ensuing litigation, continues to impede PFAS-affected residents' most intimate human right: the right to physical integrity of their own bodies, and the mental peace the realization of this right makes possible.

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<sup>91</sup> *Nix v. Chemours Co. FC LLC*, *supra* n.10, Ex. 2 at Fig. 36, ECF No. 336-2.

<sup>92</sup> U.N. General Assembly, A/74/480, *supra* n.81, at 10/24.

<sup>93</sup> See EPA Motion to Dismiss, *Center for Environmental Health, et al., v. Regan*, E.D.N.C. No. 7:22-cv-00073-M, ECF-47 at 10 (filed June 23, 2022) (stating that EPA is reviewing and contributing to existing worker and other health studies, but not committing to any further health studies, or any specific to the Cape Fear River area or to Fayetteville Works employees).

<sup>94</sup> Callie Lyons, *Stain-Resistant, Nonstick, Waterproof, and Lethal: The Hidden Dangers of C8* (2007), at 141.

<sup>95</sup> *Id.* at 142.

<sup>96</sup> Center for Environmental Health, et al., *Petition to Require Health and Environmental Testing Under the Toxic Substances Control Act on Certain PFAS Manufactured by Chemours in Fayetteville, North Carolina* (Oct. 13, 2020), at 23.

<sup>97</sup> *Id.*

## The Right to Life, Health, and Life with Dignity

*“I’m putting [water] on my yard and on my garden. Does PFAS go through [the soil]? I’ve got three-quarters of an acre that I’m watering. I don’t want to be eating food that’s absorbing [PFAS].”*

- Wayne Lewis, New Hanover County<sup>98</sup>

### A. Nature of the right

Violation of the right to water also violates the right to life, health, and life with dignity. The SR on Toxics’ mandate explicitly identifies exposure to hazardous substances, including pollutants that contaminate water and the environment, as infringing on these human rights. As the SR has so powerfully stated: “The toxification of our planet and bodies constitutes what is arguably one of the most underappreciated threats to the ability of present and future generations to enjoy their human rights to life, health and a life with dignity.”<sup>99</sup>

Article 6 of the International Covenant on Civil and Political Rights (ICCPR) recognizes the right to life.<sup>100</sup> Interpreting this article, the Human Rights Committee (HRC) has written that a person’s right to life requires conditions that permit them “to enjoy a life with dignity,” requiring conditions that are at minimum “free from acts and omissions that are intended or may be expected to cause their unnatural or premature death.”<sup>101</sup> The ICCPR is an international instrument that the United States has both signed and ratified.<sup>102</sup> As a treaty member, the U.S. is therefore obligated to protect Cape Fear residents’ right to life where it is threatened, including by toxic exposures and correspondingly increased risk of illness or death.

The HRC has explicitly found that human exposure to toxic chemicals violates the right to life, determining, in the case of *Cáceres et al. v. Paraguay*, that Paraguay violated the right to life and life with dignity when agribusinesses exposed 22 people to toxic pesticides in levels that caused hospitalizations and in at least one case, death.<sup>103</sup> In a similar vein, a communication by the Toxics SR regarding Puerto Rico cited a connection between residents’ exposure to toxic chemicals and elevated cancer rates (compared to background levels) as cause for investigation

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<sup>98</sup> As quoted in Will Atwater, *Residents’ frustration grows at slow progress to address PFAS pollution in their water*, N.C. HEALTH NEWS (Mar. 14, 2023), <https://www.northcarolinahealthnews.org/2023/03/14/frustration-grows-at-slow-progress-to-address-pfas-pollution-in-their-water/>. Wayne’s wife died in 2009 due to an unexplained liver condition. Will Atwater, *Residents’ frustration grows at slow progress to address PFAS pollution in their water*, N.C. HEALTH NEWS (Mar. 14, 2023), <https://www.northcarolinahealthnews.org/2023/03/14/frustration-grows-at-slow-progress-to-address-pfas-pollution-in-their-water/>.

<sup>99</sup> U.N. General Assembly, A/74/480, *supra* n.81, at 5.

<sup>100</sup> U.N. General Assembly, International Covenant on Civil and Political Rights (ICCPR), 16 Dec. 1966, United Nations, Treaty Series, vol. 999, p. 171 (Art. 6(1): “Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life.”)

<sup>101</sup> U.N. Human Rights Committee (HRC), *General comment no. 36, Article 6 (Right to Life)*, 3 September 2019, CCPR/C/GC/35, ¶ 3.

<sup>102</sup> U.N. General Assembly, ICCPR, *supra* n.100, at 7. The United States signed on October 5, 1977, and ratified on June 8, 1992.

<sup>103</sup> U.N. Human Rights Committee, Communication No 2751/2016 at ¶ 7.5, *Cáceres et al. v. Paraguay* (July 25, 2019), UN Doc CCPR/C/126/D/2751/2016.

and concern.<sup>104</sup> In the lower Cape Fear River watershed, the scale of toxics exposure is orders of magnitude larger, and the scale of governmental responsibility correspondingly greater.<sup>105</sup>

The U.N. General Assembly, the Human Rights Council, and other Special Procedures have likewise identified exposure to hazardous substances as infringing on the right to life.<sup>106</sup> This encompasses a right to water free from contaminants.<sup>107</sup> States have a corresponding duty to protect individuals and communities from exposure to hazardous substances, including pollution and toxic chemicals.<sup>108</sup>

Further, and critically, the U.N. Guiding Principles on Business and Human Rights require *businesses* to protect human rights.<sup>109</sup> The SR on Toxics has recognized that “business enterprises have a responsibility to prevent exposure to hazardous substances resulting from their activities and/or business relationships,” irrespective of the laxity or stringency of regulation.<sup>110</sup> One communication by Working Group and Environmental SRs states that the responsibility to respect human rights requires that business enterprises:

- (a) Avoid causing or contributing to adverse human rights impacts through their own activities, and address such impacts when they occur; [and]
- (b) Seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts. (Guiding Principle 13).<sup>111</sup>

Chemours thus has an independent obligation to cease violating the rights to life, health, and life with dignity in its ongoing operations and its manner of addressing PFAS contamination to date.

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<sup>104</sup> Special Rapporteur on Toxics and Human Rights, Communication, AL USA 8/2019, 2-3 (March 15, 2019).

<sup>105</sup> Additionally, the ICESCR’s recognition of the right to life and health is even stronger than the ICCPR’s in binding countries to achieving, and preventing violation of, the right to the “highest attainable standard of physical and mental health.” ICESCR, *supra* n.37, Art. 12. ICESCR’s treaty body has interpreted this right to require states “to adopt measures against environmental... hazards and against any other threat” that data suggest. Special Rapporteur on Toxics regarding Flint Michigan, AL USA 1/2016, 11 (2 Mar. 2016). Article 11 further binds parties to protect the right to an adequate standard of living, for which the right to safe water is recognized as necessary. As an ICESCR signatory, the U.S. has “agreed to bind itself in good faith to ensure that nothing is done that would defeat the object and purpose” of the ICESCR. Special Rapporteur on Toxics and Human Rights et. al., Communication, AL USA 6/2015, 7 (11 May 2015).

<sup>106</sup> See U.N. General Assembly, A/74/480, *supra* n.81; see also HRC, *General comment no. 36, Article 6 (Right to Life)*, 3 Sept. 2019, CCPR/C/GC/35, ¶ 3 (“The right to life is a right that should not be interpreted narrowly. It concerns the entitlement of individuals to be free from acts and omissions that are intended or may be expected to cause their unnatural or premature death, as well as to enjoy a life with dignity”).

<sup>107</sup> See AL USA 33/2020, pp. 8, 10; see also U.N. General Assembly Resolution 64/292; HRC Resolution 15/9; Universal Declaration of Human Rights, Art. 25; and *International Standards: Human rights treaties with explicit reference to safe drinking water and sanitation*, UNITED NATIONS SPECIAL RAPPORTEUR ON THE HUMAN RIGHT TO SAFE DRINKING WATER & SANITATION (2023), [https://sr-watersanitation.ohchr.org/en/rightstowater\\_3.html](https://sr-watersanitation.ohchr.org/en/rightstowater_3.html) (list of treaties that recognize the human right to water and sanitation).

<sup>108</sup> U.N. General Assembly, A/74/480, *supra* n.81, at 6.

<sup>109</sup> U.N. Office of the High Commissioner for Human Rights, *Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework*, HR/PUB/11/04 (2011).

<sup>110</sup> U.N. General Assembly, *supra* n.81, A/74/480, at 5-24.

<sup>111</sup> Special Rapporteur on Toxics and Human Rights et. al., Communication, AL OTH 86/2020, 8 (Feb. 16, 2021).

## B. Evidence of Violation

### 1. *DuPont/Chemours*

DuPont, and then Chemours, have released toxic PFAS from Fayetteville Works into air, water, soil, and groundwater in North Carolina for more than four decades. DuPont’s blatant disregard for human health and life has already been the subject of a documentary film probing PFAS-induced birth defects among offspring of DuPont workers.<sup>112</sup> It has also been probed in an only-lightly-fictionalized docudrama chronicling cancers and deaths attributable to DuPont’s community-scale contamination in Parkersburg, West Virginia, and Little Hocking, Ohio.<sup>113</sup> DuPont’s decades of PFAS pollution and associated human health impacts are additionally the subject of meticulously researched nonfiction books.<sup>114</sup>

Unsurprisingly, Chemours displays the same cost-externalizing behavior as its progenitor. For this reason, DuPont and Chemours were in 2018 named as the first and second defendants, respectively, in an extraordinary nationwide class action that the foremost PFAS toxic-tort litigator in the U.S. filed on behalf of *all PFAS-exposed Americans*.<sup>115</sup> The high rates of cancer, illness, and premature death that DuPont and Chemours have imposed on residents of the lower Cape Fear River watershed are but a localized manifestation of what the case complaint terms “a massive, undisclosed human health experiment without [participants’] knowledge or consent.”<sup>116</sup>

With respect to Fayetteville Works specifically, DuPont (and later, Chemours) refused to learn from sites that DuPont had previously contaminated with PFAS in other states, and that had already been the subject of administrative enforcement actions and court orders. As two among a plenitude of examples, DuPont did not install long-available thermal oxidizer technology for control of PFAS air emissions at Fayetteville Works until 2019 (*i.e.*, 39 years after construction), under compulsion from the Consent Order in DEQ and Cape Fear River Watch litigation against the company.<sup>117</sup> Likewise, DuPont, and later, Chemours, did not anticipate and address the inevitable well contamination resulting from their decades of air discharges, even though the propensity of PFAS air discharges to end up in drinking water wells was the precise subject of a 2009 Consent Order between DuPont and EPA over the same phenomenon at DuPont’s Washington Works facility in West Virginia.<sup>118</sup>

Most obviously and egregiously, first Dupont, and then Chemours, continually discharged high volumes of PFAS-containing waste water from Fayetteville Works’ manufacturing processes directly to the Cape Fear River for decades, with no intervening filtration. Corporate secrecy regarding these releases, and the resulting extraordinary levels of river-water contamination—measured by independent scientists at levels vastly greater than lifetime health advisory levels for

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<sup>112</sup> *The Devil We Know* (2018), IMDB (2023), <https://www.imdb.com/title/tt7689910/>.

<sup>113</sup> *Dark Waters* (2019), IMDB (2023), <https://www.imdb.com/title/tt9071322/>.

<sup>114</sup> See, e.g., Callie Lyons, *Stain-Resistant, Nonstick, Waterproof, and Lethal*, *supra* n.94; Robert Bilott, *supra* n.80, Ch. 1.

<sup>115</sup> *Hardwick v. 3M Co.*, *supra* n.24, ¶ 1.

<sup>116</sup> *Id.*

<sup>117</sup> *N.C. v. Chemours Co. FC, LLC*, *supra* n. 62, Consent Order ¶ 7(c).

<sup>118</sup> EPA, Order on Consent, *In the matter of E.I. du Pont de Nemours and Company*, Docket Nos. SDWA-03-2009-0127 DS, SDWA-05-20090001 (Mar. 10, 2009).

drinking water<sup>119</sup>—meant that the contamination went unknown to water utilities or their consumers. As a logical consequence, because public water systems were not on notice to filter their source water for PFAS before supplying it, and end users were not on notice to filter their water for PFAS before consuming it, residents of Pender, Brunswick, and New Hanover who relied on the river as their primary source of drinking water were for decades drinking these meteoric levels of PFAS daily. Indeed, it was not until a local reporter in 2017 reported on the shocking findings of the Cape Fear River study that the contamination crisis prompting this SR communication came to light,<sup>120</sup> and prompted community shock, outrage, and mobilization. Of necessity, multi-front remedial efforts, and efforts to prevent *any* further PFAS exposures to dangerously over-exposed local communities, have since become many residents’ involuntary and unpaid second job.

Through DuPont’s and Chemours’ toxics-generating actions, related deception, and ongoing failure to mitigate meaningfully the biological and psychological effects of local residents’ chronic PFAS exposure, both companies have violated area North Carolinians’ rights to life, health, and life with dignity.

## 2. DEQ/EPA

DEQ and EPA have long acquiesced in DuPont’s and Chemours’ polluting actions through their insufficient regulation of PFAS and inadequate enforcement response to PFAS contamination. For example, “DEQ only levied the largest fine ever issued in the state’s history in 2018 against Chemours — \$13 million, about 1% of the company’s profits that year — after Cape Fear River Watch sued them to act.”<sup>121</sup>

Most troubling, EPA continues to violate North Carolina residents’ human rights directly, through its ongoing refusal to mandate necessary health studies. This refusal was most recently manifest in the agency’s rejection of a request from local and national civil society groups to require (under the authority of Section 4 of the Toxic Substances Control Act) *a comprehensive*

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<sup>119</sup> The PFAS contamination of the Cape Fear River came to public attention after the 2016 publication of Mei Sun, et al., *Legacy and Emerging Perfluoroalkyl Substances Are Important Drinking Water Contaminants in the Cape Fear River Watershed in North Carolina*, ENVIR. SCI. TECHNOL. LETT. 3, at 415, 417 & Fig.2 (Nov. 10, 2016), <https://pubs.acs.org/doi/abs/10.1021/acs.estlett.6b00398>. Based on further investigation and refinement, independent scientists now estimate that river water at the water intake for the City of Wilmington’s drinking water utility has 130,000 parts per trillion (ppt) of total PFAS. Lisa Sorg, *Breaking: New Analysis Indicates that Toxics Were Present in Wilmington Drinking Water at Extreme Levels*, NC Newslines (Oct. 9, 2019), <https://ncnewslines.com/briefs/breaking-new-analysis-indicates-that-toxics-were-present-in-wilmington-drinking-water-at-extreme-levels/#sthash.zypYxJAF.dpbs>. For comparison, EPA’s current lifetime advisory levels for human exposure to individual PFAS are *orders of magnitude* lower: 0.004 ppt for PFOA, and 0.02 ppt for PFOS, 10 ppt for PFBS, and 2000 ppt for GenX.

<sup>120</sup> Vaughn Hagerty, *Toxin Taints CFPWA Drinking Water*, STAR NEWS ONLINE (June 7, 2017), <https://www.starnews.com/story/news/environment/2017/06/07/toxin-taints-cfpwa-drinking-water/20684831007/>

<sup>121</sup> Johanna Still, *Senator, Clean Water Advocates Ask For State Action After Troubling Genx Toxicity Report*, PORT CITY DAILY (Oct. 31, 2021), <https://portcitydaily.com/local-news/2021/10/31/senator-clean-water-advocates-ask-for-state-action-after-troubling-genx-toxicity-report/>.

*epidemiological study of North Carolina residents exposed to PFAS pollution from Fayetteville Works*, to be conducted independent of Chemours, but at the company’s expense.<sup>122</sup>

The study petitioners seek would build upon the critical work performed by the “C8 Science Panel,” a body imagined and realized through a creative PFAS toxic tort case settlement with DuPont in West Virginia.<sup>123</sup> This panel of independent scientists definitively established the causal link between human exposure to the 8-carbon PFAS known as PFOA and the development of testicular cancer, kidney cancer, and four other serious diseases.<sup>124</sup> Further epidemiological study is essential to establish beyond argument that six-carbon PFAS like GenX, and other so-called “shorter chain” PFAS, likewise cause specific health conditions. Robust, independent science is necessary because DuPont and Chemours continually contest linkages between various PFAS and adverse health outcomes in their regulatory filings, litigation positions, and public statements despite an ever-growing body of inculpatory scientific literature.<sup>125</sup>

An epidemiological study is not simply a body count. Only by establishing the causal link between chemical exposures and specific health harms can residents of lower Cape Fear River communities seek relevant medical tests for early signs of disease, in turn making possible intervention and treatment to avoid needlessly tragic health outcomes. Further, only by establishing causation can the PFAS-exposed establish the polluting companies’ tort liability and obtain some measure of compensation—compensation often essential to pay for medical treatment and other life circumstances (such as occupational disability) that PFAS exposure may cause.

EPA’s refusal to use readily available TSCA authority to mandate the health studies that residents seek is poor public policy. Moreover, should EPA have any reluctance to pursuing this common-sense course under that statute, there are other legal avenues through which the federal government can achieve the same end. For example, a 2017 request to both EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) explains that Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) empowers and indeed *requires* ATSDR to provide epidemiological studies to address “public health emergencies believed to be caused by exposure to toxic substances”<sup>126</sup>—a research activity that EPA could support. Although ATSDR has since embarked on a multi-site study of PFAS exposure,<sup>127</sup> study sites do *not* include North Carolina, or many of the hundreds of PFAS to which lower Cape Fear River residents have been additively and cumulatively exposed over time.

Ultimately, it matters not on which legal authority EPA relies in ensuring the near-term conduct of epidemiological health studies of the lower Cape Fear River population. It only requires

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<sup>122</sup> See EPA Motion to Dismiss, *Center for Environmental Health, et al., v. Regan*, E.D.N.C. No. 7:22-cv-00073-M, ECF-47 at 10 (filed June 23, 2022) (stating that EPA is reviewing and contributing to existing health studies, but not committing to any epidemiological study specific to Cape Fear River communities).

<sup>123</sup> Robert Bilott, *supra* n.80, at 241 and *passim*.

<sup>124</sup> *Id.* at 307.

<sup>125</sup> See Inset Box, *supra* p.2.

<sup>126</sup> Letter from Robert Bilott to Centers for Disease Control, Agency for Toxic Substances and Disease Registry, Environmental Protection Agency, and U.S. Attorney General, *Re: Request for Coordinated Nationwide PFAS Health Study and Testing and Notice of Intent to Sue* (Sept. 5, 2017), at 2-3.

<sup>127</sup> *PFAS Multi-site Study (MSS)*, AGENCY FOR TOXIC SUBSTANCES DISEASE REGISTRY (Feb. 24, 2023), <https://www.atsdr.cdc.gov/pfas/activities/studies/multi-site.html>.



that EPA take seriously this recurrent public demand, and vindicate residents’ human rights to life, health, and dignity through its fulfillment.

## **The Right to a Clean, Healthy, and Sustainable Environment**

*“For far too long, families across America – especially those in underserved communities – have suffered from PFAS in their water, their air, or in the land their children play on.”*

- Michael Regan, EPA Administrator<sup>128</sup>

### **A. Nature of the Right**

The failure to provide clean water additionally violates the human right to a clean, healthy, and sustainable environment. International legal mechanisms have long recognized that clean water is essential to an environment’s safety and sustainability, and that a clean environment is necessary to provide the right to life.<sup>129</sup> The right to a sustainable environment has been newly elevated by its 2022 recognition in a U.N. General Assembly Resolution supported by the United States.<sup>130</sup>

Vindication of the right to a clean environment requires states to implement positive, active actions, including those to prevent private actors from continuing to violate this right.<sup>131</sup>

### **B. Evidence of Violation**

#### *1. DuPont/Chemours*

DuPont and Chemours have consistently violated residents’ rights to a clean, healthy environment for all four decades of Fayetteville Works’ operation. PFAS-laden effluent from the facility has traveled nearly 100 miles of the Cape Fear River.<sup>132</sup> PFAS air emissions from the facility have been deposited on over 1,000 square miles of land in the Cape Fear River watershed, from which they then leach into soil, groundwater, surface water, and the Cape Fear River.<sup>133</sup> Further, GenX, as a six-carbon compound, is more difficult to filter out of water than longer-chain

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<sup>128</sup> Will Atwater, *PFAS evidence piling up, putting polluters on notice*, N.C. HEALTH NEWS (Nov. 1, 2022), <https://www.northcarolinahealthnews.org/2022/11/01/pfas-evidence-is-piling-up-and-putting-polluters-onnotice/>.

<sup>129</sup> See David Knox, *Framework Principles for Human Rights and the Environment by Special Rapporteur on Human Rights and the Environment* at 4 (2018); UN Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)*, 11 August 2000, E/C.12/2000/4, ¶ 4; UN Human Rights Committee (HRC), *General comment no. 36, Article 6 (Right to Life)*, 3 September 2019, CCPR/C/GC/35, ¶ 62 (“Implementation of the obligation to respect and ensure the right to life, and in particular life with dignity, depends, inter alia, on measures taken by States parties to preserve the environment and protect it against harm, pollution and climate change caused by public and private actors”); see also UN General Assembly Resolution, 26 July 2022, A/76/L.75, ¶ 2 (the right to a clean, healthy and sustainable environment is related to other rights and existing international law”).

<sup>130</sup> U.N. General Assembly Resolution, 26 July 2022, A/76/L.75.

<sup>131</sup> See John Knox, *Framework Principles for Human Rights and the Environment by Special Rapporteur on Human Rights and the Environment* (2018), ¶ 11; see also UN Human Rights Committee (HRC), *General comment no. 36, Article 6 (Right to Life)*, 3 September 2019, CCPR/C/GC/35, ¶ 62.

<sup>132</sup> *Nix v. Chemours Co. FC LLC*, *supra* n.10, Ex. 8, § 8, ECF 336-8.

<sup>133</sup> *Id.*

PFAS, and is highly mobile in the environment. EPA has noted that conventional treatments of drinking water and wastewater will not remove GenX,<sup>134</sup> and also that in the environment, GenX “rapidly leach[es] to groundwater from soil and landfills.”<sup>135</sup>

Because Fayetteville Works’ PFAS releases have spread through aquatic and terrestrial ecosystems, DuPont and Chemours have violated not only residents’ right to clean water, but also their right to a clean and healthy environment. Detlef Knappe, a PFAS researcher at North Carolina State University, noted that PFAS contaminate the entire local environment: “[I]t’s not just drinking water, it’s likely food, fishing, swimming in the lakes, property values . . . [I]t’s a result of four decades of Chemours basically operating without oversight in terms of those compounds.”<sup>136</sup>

The implications of this persistent and ongoing contamination are especially strong for local fish and game. As the Toxics SR has recognized, PFAS dangers raise concerns for residents about “the level of PFAS pollution in their organisms and the safety of the food products they consume.”<sup>137</sup> North Carolina’s freshwater fish are now extremely contaminated by PFAS, with average PFAS levels *over 5,000 times* what EPA recommends as safe.<sup>138</sup> Dr. Tasha Stoiber, a senior scientist with the Environmental Working Group, explains that when PFAS levels in the aquatic ecosystem are high, even eating a few meals of fish annually can markedly increase exposure.<sup>139</sup> Yet to this day, North Carolina does not have freshwater fish consumption advisories for PFAS. Nor does it have saltwater fish consumption advisories, even though the Cape Fear River empties directly into the Atlantic Ocean and thus conveys its PFAS load to the near-shore environment (and likely beyond). These informational deficits pose a danger for community members who rely on fishing for their livelihood, sustenance, cultural identity, recreation, and low-cost protein sources.<sup>140</sup>

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<sup>134</sup> *Draft for Public Comment: Human Health Toxicity Values for Hexafluoropropylene Oxide (HFPO) Dimer Acid and Its Ammonium Salt (CASRN 13252-13-6 and CASRN 62037-80-3): Also Known as “GenX Chemicals”* at 6-9, U.S. EPA (Nov. 2018), [https://www.epa.gov/sites/production/files/2018-11/documents/genx\\_public\\_comment\\_draft\\_toxicity\\_assessment\\_nov2018-508.pdf](https://www.epa.gov/sites/production/files/2018-11/documents/genx_public_comment_draft_toxicity_assessment_nov2018-508.pdf). EPA, Human Health Toxicity Values for Hexafluoropropylene Oxide Dimer Acid and Its Ammonium Salt, also Known as “GenX Chemicals,” Public Comment Draft (Nov. 2018), 6-9.

<sup>135</sup> *Id.*

<sup>136</sup> Tom Perkins, Cancer Fears Plague Residents of US Region Polluted by ‘Forever Chemicals’, THE GUARDIAN, (Jul. 12, 2022), <https://www.theguardian.com/us-news/2022/jul/12/north-carolina-pfas-toxic-forever-chemicals-cancer>.

<sup>137</sup> Marcos A. Orellana, *End-of-visit statement by the United Nations Special Rapporteur on toxics and human rights, Marcos A. Orellana on his visit to Italy*, *supra* n.88.

<sup>138</sup> Liz McLaughlin, “*This is heartbreaking*”: Study finds dangerous chemicals in freshwater fish, WRAL NEWS, <https://www.wral.com/this-is-heartbreaking-study-finds-dangerous-chemicals-in-freshwater-fish/20679753/> (“The average PFAS level of fish analyzed in North Carolina is 20,337 ppt,” as compared to EPA’s new guidance of 4 ppt.)

<sup>139</sup> Nadia Barbo, *Locally caught freshwater fish across the United States are likely a significant source of exposure to PFOS and other perfluorinated compounds*, ENVTL. RSCH. (Mar. 1, 2023), <https://www.sciencedirect.com/science/article/pii/S0013935122024926?via%3Dihub>.

<sup>140</sup> Liz McLaughlin, “*This is heartbreaking*,” *supra* n.138; NC Dep’t of Health and Human Svces., *Occupational & Environmental Epidemiology: Fish Consumption Advisories*, (Dec. 2, 2022), <https://epi.dph.ncdhhs.gov/oeep/programs/fish.html#:~:text=The%20N.C.%20Department%20of%20Environmental,safe%20to%20eat%20and%20enjoy>.

PFAS contamination extends to Cape Fear River area wildlife as well, and beyond, to the Atlantic Ocean at the river's mouth. Reporters have described sickness in alligators,<sup>141</sup> immunity-related disease in bottlenose dolphins,<sup>142</sup> and PFAS in the livers of Atlantic seabirds in North Carolina.<sup>143</sup> All of these impacts cumulate to a substantial impairment of residents' human right to a clean and healthy environment.

## 2. DEQ/EPA

DEQ and EPA have both acquiesced in DuPont and Chemours' violations of the right to a clean and healthy environment. Of particular note is EPA's glacial pace in naming PFAS *in domestic law* what they are *in fact*: hazardous substances. The conferral of "hazardous substance" designation on a myriad of known-harmful PFAS under CERCLA would be a game changer at Fayetteville Works and nationally. It is this CERCLA designation that makes companies strictly, jointly, severally, and retrospectively liable for toxic contamination, with no statute of limitations. As such, it is an obvious way to force DuPont and Chemours to belatedly internalize costs thus far unfairly borne by the community, and to disincentive Chemours from further production of PFAS.

Encouragingly, as of this month (April, 2023), EPA appears to agree: in an Advance Notice of Proposed Rulemaking, it has indicated an intent to pursue CERCLA hazardous-substance designation for seven PFAS besides PFOA and PFOS—importantly, including GenX.<sup>144</sup> To protect the human right to a clean and safe environment, EPA must vigorously defend these proposed regulatory designations against certain industry attack. EPA must also go much further, however, to designate a *much broader* suite of PFAS as "hazardous substances," as requested in three petitions the agency has received on the subject: one from the civil society group Public Employees for Environmental Responsibility, one from the UC Berkeley Environmental Law Clinic, and one from the State of New Mexico.<sup>145</sup> Additionally, as these petitions uniformly propose, EPA should designate PFAS wastes as "hazardous" under the Resource Conservation and Recovery Act (RCRA), to create a much-needed cradle-to-grave tracking system for PFAS

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<sup>141</sup> Tom Perkins, *High levels of 'forever chemicals' likely making alligators sick in Cape Fear River*, THE GUARDIAN (Oct. 20, 2022), <https://www.theguardian.com/environment/2022/oct/20/forever-chemicals-alligators-sick-cape-fear-river>.

<sup>142</sup> Max G. Levy, *PFAS chemicals reach remote oceans and accumulate in whales, dolphins, and other ocean life*, MASSIVE SCI. (Oct. 22, 2020), <https://massivesci.com/articles/pfas-chemical-ocean-mammals-fish-dolphins-wildlife/>.

<sup>143</sup> Kayla Paige Williams, *Toxic PFAS found in livers of Atlantic seabirds, including those in NC*, N.C. POLICY WATCH, (Oct. 1, 2020), <https://pulse.ncpolicywatch.org/2020/10/01/toxic-pfas-found-in-livers-of-atlantic-seabirds-including-those-in-nc/#sthash.eDu2KkVP.dpbs>.

<sup>144</sup> Environmental Protection Agency, *Advance Notice of Proposed Rulemaking: Addressing PFAS in the Environment*, 88 Fed. Reg. 22399 (Apr. 13, 2023).

<sup>145</sup> Michelle Lujan Grisham, Governor of New Mexico, correspondence to Michael Regan, EPA Administrator [re: PFAS listings under RCRA] (June 23, 2021), <https://www.env.nm.gov/wp-content/uploads/2021/06/2021-06-23-Governor-letter-to-EPA-for-PFAS-petition.pdf>; UC Berkeley Environmental Law Clinic, *Petition for Rulemaking: RCRA Regulation of Wastes Containing Long-Chain PFAS and GenX Chemicals* (Jan. 15, 2020), <https://www.law.berkeley.edu/wp-content/uploads/2020/01/Signed-PDF-FINAL-Filed-Petition-for-PFAS-Rulemaking-.pdf>; Public Employees for Environmental Responsibility, *Petition for Rulemaking Pursuant to Section 6974(a) of the Resource Conservation and Recovery Act Concerning the Regulation of a Class of Wastes Containing Per- and Polyfluorinated Substances* (Sept. 19, 2019), [https://peer.org/wp-content/uploads/2019/10/9\\_19\\_19\\_PFAS\\_RCRA\\_Petition.pdf](https://peer.org/wp-content/uploads/2019/10/9_19_19_PFAS_RCRA_Petition.pdf).

waste.<sup>146</sup> To effectuate North Carolinians’ right to a clean and safe environment, EPA must use all legal tools at its disposal to remedy the ongoing mismatch between the scale of its proposed solutions and the scale of the PFAS contamination problem.

### The Right to Information

*“It has taken six decades of research on humans to really understand how these chemicals impact our biology in so many different ways.”*

- Dr. David Andrews, senior scientist, Environmental Working Group<sup>147</sup>

#### A. Nature of the Right

The SR on Toxics has consistently identified the right to information as integral to the mandate to uphold human rights.<sup>148</sup> This right was articulated in a 2019 joint SR communication to the U.S. government concerning the U.S. Navy’s inadequate remedy for a community’s toxics exposure from military activities and related cleanup efforts.<sup>149</sup> The SRs stated: “Access to information is a prerequisite to the protection of human rights, including worker rights, from hazardous substances, to public participation in decision-making and for monitoring governmental and private-sector activities.”<sup>150</sup>

Critically, in the context of toxics production, use, and disposal, the SR on Toxics has emphasized that the realization of informational rights requires more than simply the government’s provision of data already in hand:

States discharge their human rights obligations not when they provide *access* to information, but rather *when they generate, or compel responsible third parties to generate, the information necessary to understand the hazards and risks of exposure and then use that information to execute their duty to prevent exposure.*<sup>151</sup>

Underscoring that accurate scientific evidence is “necessary to understand the hazards and risks of [toxics] exposure,” and relevant to preventing such exposure, the SR has released Principles on Human Rights and the Protection of Workers that explain states’ corresponding duties:

States must prevent, through legislation or other measures, the deliberate tampering with, obfuscation or distortion of scientific evidence or the manipulation of processes by

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<sup>146</sup> See *New Mexico Petitions for PFAS Listing Under RCRA*, McCoy (Sept. 14, 2021), <https://www.mccoyseminars.com/newsletter/article.cfm?artnum=858> (summarizing and hyperlinking to all three petitions).

<sup>147</sup> Tom Perkins, *Alarming toxic ‘forever chemicals’ found in animals’ blood – study*, THE GUARDIAN (Feb. 22, 2023), <https://www.theguardian.com/environment/2023/feb/22/animal-toxic-pfas-contamination-study>.

<sup>148</sup> See A/74/480, *supra* note 81 (emphasis added).

<sup>149</sup> AL USA 11/2018.

<sup>150</sup> E/CN.4/2000/63, ¶ 42.

<sup>151</sup> See A/74/480, *supra* n. 81 (all emphasis added).

business enterprises .... Perpetrators of such misconduct should be held accountable, including through criminal sanctions where appropriate.<sup>152</sup>

This counsel could not be more apt had it been drafted with DuPont, Chemours, and their nominal regulators in mind.

## B. Evidence of Violation

### 1. *DuPont/Chemours*

DuPont, and then Chemours, released PFAS from Fayetteville Works for decades without informing residents, water utilities, or regulators. More generally, as companies engaged in the manufacturing of PFAS on a global basis, they made false claims of PFAS safety where toxicity was either unknown, or known to the companies but undisclosed to regulators or the public. They also delayed, contested, and obstructed worker, community, and tort plaintiffs' efforts to obtain comprehensive testing of people's bodies and drinking water wells, to receive competent diagnoses of medical conditions causally linked to PFAS, and to design and conduct epidemiological studies that would definitively link specific PFAS with specific adverse health outcomes. These facts and more regarding DuPont/Chemours' failures of investigation, deception as to PFAS safety, and obstruction of access to information are particularly well chronicled in these extended works, each and all of which CCF commends to the SR on Toxics in full:

- Callie Lyons, Stain-Resistant, Nonstick, Waterproof, Lethal: The hidden dangers of C8 (Praeger, 2007)
- David Andrews and Bill Walker, Poisoned Legacy: Ten years later, chemical safety and justice for DuPont's Teflon victims remain elusive (Environmental Working Group report, 2015)
- Rob Bilott, Exposure: Poisoned water, corporate greed, and one lawyer's twenty-year battle against DuPont (Simon & Schuster, 2019).

Hard evidence of decades of DuPont/Chemours corporate deception will also surely be adduced in *Hardwick v. 3M Company, et al.*, an unprecedented pending class action on behalf of PFAS-exposed individuals nationwide.<sup>153</sup> Notwithstanding the barriers to class certification in toxic tort cases, this case has already been certified as to a vast subgroup of the class.<sup>154</sup>

CCF here incorporates by reference the catalogues of DuPont/Chemours deception in the above-listed sources. The timeline below, while noncomprehensive, captures key moments in DuPont's and now Chemours' campaign of disinformation, misinformation, and obfuscation. The net result is that the two companies have consistently failed or overtly refused to provide information to exposed communities and regulators regarding the presence and dangers of PFAS at Fayetteville Works and beyond.

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<sup>152</sup> See A/HRC/42/41(2019), at 12.

<sup>153</sup> *Hardwick v. 3M Company, et al.*, *supra* n.24 (filed Oct. 4, 2018).

<sup>154</sup> *Id.*, Opinion and Order at 1 (S.D. Ohio Mar. 7, 2022), ECF 233.

# For 60 years, DuPont, and then Chemours, knew PFAS were toxic and did not disclose the risks to the public: A Timeline of Deceit Surrounding Fluorochemicals

1970

DuPont knows PFAS is toxic by the 1970s. Human and animal experiments conducted for decades confirm that exposure from PFAS causes organ damage and bodily harm. DuPont does not warn the public of these hazards, and instead continues to market and produce PFAS. [A]

1981

DuPont removes pregnant employees from working in the Teflon division, due to concerning evidence from animal studies that exposure can cause birth defects. Later, when surveyed, two of seven employees have children with birth defects. DuPont neglects to publicize the findings or alert the Environmental Protection Agency, and allows female employees to return to the Teflon division. [B]

1984

DuPont finds elevated C8 levels in tap water in Little Hocking, Ohio. DuPont fails to alert the community, the water utility, or regulators about its water testing program and findings for another 18 years until 2002. [C]

1990

Documents revealed in litigation discovery establish that DuPont was long aware of PFAS risks, and found PFAS was linked to testicular, pancreatic, and liver cancer in lab animals. DuPont nonetheless dumps 7,100 tons of PFAS into a West Virginia landfill and when 150 cattle die nearby, DuPont blames the farmer for poor animal husbandry. [D]

2008

By this year, DuPont knew that 5.4 million pounds of PFAS were released from its Fayetteville Works plant into the environment per year, including discharges to the Cape Fear River. Although internal DuPont presentations acknowledged the severity of the contamination, DuPont made no PFAS pollution reduction efforts for seven years. [E]

2009

EPA announces that GenX chemicals are toxic to humans, and orders DuPont to destroy 99% of its GenX waste. DuPont does not disclose to EPA that it has been discharging GenX and other PFAS for 24 years. [F]

2015

DuPont attempts to separate itself from its troubling Performance Chemicals (i.e., PFAS) by creating The Chemours Company. [G]

2018

Despite Chemours' knowledge of the facility's considerable PFAS air emissions and their risks, the company does not install any filtration at Fayetteville Works to reduce these emissions until December 2019. DuPont/Chemours inaccurately reports air emissions of GenX to North Carolina's Department of Environmental Quality for years. [H]

2023

Chemours seeks permit to expand PFAS production without providing adequate data and analysis on the impact this will have on the local community and the Cape Fear River watershed. [I]

[A] Jared Hayes, For decades, polluters knew PFAS chemicals were dangerous but hid risks from public, Environmental Working Group (Apr. 29, 2019), <https://www.ewg.org/research/decades-polluters-knew-pfas-chemicals-were-dangerous-hid-risks-public>; see also Dupont, "Choose a pan like you choose a man. It's what on the inside that counts," ALAMY, 1970s-uk-teflon-saucepans-magazine-advert-EXR83Y.jpeg (1970).

[B] Robert Bilott, *Exposure*, 176-177 (2019).

[C] C-8 Sampling (March - June 1984), [https://static.ewg.org/files/PFOA\\_127box.pdf?\\_ga=2.145487796.1019363632.1676253811.410641165.1674083608](https://static.ewg.org/files/PFOA_127box.pdf?_ga=2.145487796.1019363632.1676253811.410641165.1674083608); Little Hocking Water Association, Inc. v. E.I. du Pont de Nemours and Company, No. 2:2009ev01081 (S.D. Ohio, 2015) ("In 2002, DuPont met with representatives of Little Hocking to notify them of the presence of C8 in its water supply."); <https://law.justia.com/cases/federal/district-courts/ohio/ohsdcce/2:2009ev01081/134678/439/>.

[D] Nathaniel Rich, *The Lawyer Who Became DuPont's Worst Nightmare*, N.Y. Times (Jan. 6, 2016), <https://www.nytimes.com/2016/01/10/magazine/the-lawyer-who-became-duponts-worst-nightmare.html>; See *Exposure*, supra note [B], at 38.

[E] Ex. 8 ¶ 23, *Nix v. Chemours Co. FC LLC*, No. 7:17-CV-00189-D (E.D.N.C. S. Div. May 18, 2022), ECF No. 336-8.

[F] Ex. 9, *Nix v. Chemours Co. FC LLC*, No. 7:17-CV-00189-D (E.D.N.C. S. Div. May 18, 2022), ECF No. 336-9 (describing EPA concern that GenX chemicals could be "toxic ... to people"); Ex. 10, *Nix v. Chemours Co. FC LLC*, No. 7:17-CV-00189-D (E.D.N.C. S. Div. May 18, 2022), ECF No. 336-10 ("What DuPont did not disclose to the EPA when it signed the 2009 Consent Order was that, since 1985, DuPont had already discharged enormous quantities of GenX and other PFAS as byproducts of its Vinyl Ether manufacturing process.")

[G] Chemours, *DuPont Completes Spin-off of The Chemours Company*, <https://investors.chemours.com/news-releases/news-releases-details/2015/DuPont-Completes-Spin-off-of-The-Chemours-Company/default.aspx> (July 1, 2015); Cape Fear Public Utility Authority v. EIDP, Inc., C.A. No. 2023-0363 (Del. Ch. 2023).

[H] Ex. 16 ¶¶ 39-40, 43, *Nix v. Chemours Co. FC LLC*, No. 7:17-CV-00189-D (E.D.N.C. S. Div. May 18, 2022), ECF No. 336-16. ("It is also my opinion that environmental impacts could have been significantly reduced if DuPont and Chemours had taken proactive measures to reduce releases known to the companies and fully disclosed the scope of PFAS releases to DEQ.")

[I] Letter from Mark J. Cuilla, Chief Permitting Section, Division of Air Quality, North Carolina Department of Environmental Quality, to Dawn Hughes (February 20, 2023) (<https://edocs.deq.nc.gov/AirQuality/DocView.aspx?id=402255&dbid=0&repo=AirQuality&cr=1>).

## 2. DEQ/EPA

State and federal regulators have acquiesced in DuPont/Chemours' campaign of deception through under-enforcement of environmental, consumer protection, and anti-fraud laws, meting out administrative fines or pursuing civil penalties in court in amounts that roll like water off a Teflon pan. For example, although a DEQ enforcement action against Chemours in 2018 resulted in the largest fine in the state's history (\$13 million), that amount represented only about 1% of the company's single-year profits.<sup>155</sup> In a similar vein, when EPA in 2005 levied against DuPont "the largest civil administrative penalty EPA has ever obtained under any federal environmental statute," based on the company's failure to report (under TSCA Section 8(e)) PFOA risks to human health and the environment *for a 23-year period spanning 1981-2004*, this fine was only \$10.5 million<sup>156</sup>—a trifle in the context of DuPont's balance sheet. Such fines and penalties are insufficient by orders of magnitude to act as a specific deterrent to DuPont's and Chemours' ongoing informational obstruction with respect to PFAS harms.

Further, and critically, neither state nor federal enforcers have criminally charged DuPont or Chemours in connection with PFAS contamination traceable to Fayetteville Works. EPA in 2020 dropped a then-pending criminal investigation into Chemours' conduct,<sup>157</sup> and no further criminal investigation has been announced since. The SR on Toxics has rightly recognized criminal sanctions as a crucial action to protect the human right to information from gross abuse. In CCF's view, only such serious consequences can deter the extreme, sustained corporate deception manifest with respect to PFAS, and its tragic human consequences.

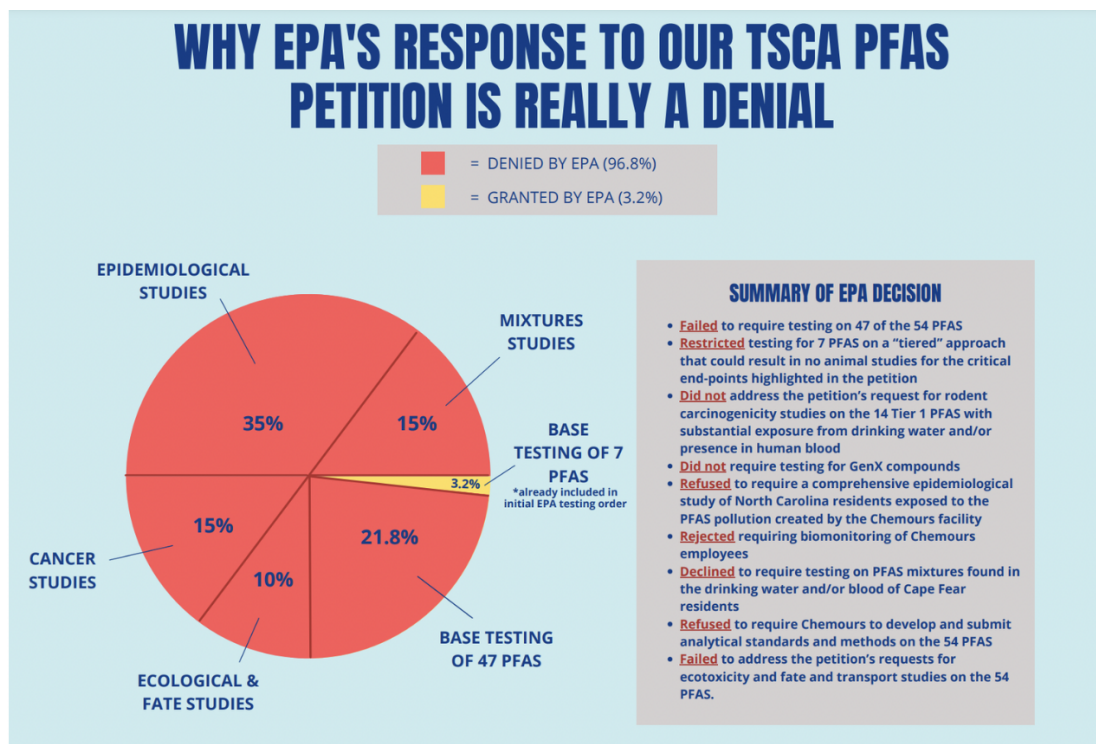
Regulators have also been derelict as to their duty to uphold North Carolinians' right to information. Profoundly disturbing is EPA's recent denial of the great majority of informational requests in civil society groups' petition to the agency under TSCA, which requested precisely what the SR on Toxics recommends: that the agency either generate, or compel PFAS manufacturers to generate, the basic data on chemical safety, human health effects, and ecological effects necessary for regulation, health protection, and management of contamination. While nominally stating that it was "granting" the groups' petition (because it agreed to testing of several PFAS chemicals in response), EPA rejected the vast majority of petitioners' informational requests. The graphic below summarizes EPA's abdication of legal duty in *deciding to refuse to require toxicity testing on 47 of the 54 PFAS known at the time of petition filing to have been released or discharged from Fayetteville Works*, and EPA's additional *refusal to mandate ecotoxicity, fate, and transport studies for any of the 54 PFAS*. These failures are atop EPA's (already described) refusal to require a Chemours-funded epidemiological study of North Carolina residents exposed to PFAS, and the agency's rejection of a request to biomonitor Chemours employees.

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<sup>155</sup> Johanna Still, *Senator, Clean Water Advocates Ask For State Action After Troubling Genx Toxicity Report*, PORT CITY DAILY (Oct. 31, 2021), <https://portcitydaily.com/local-news/2021/10/31/senator-clean-water-advocates-ask-for-state-action-after-troubling-genx-toxicity-report/>.

<sup>156</sup> U.S. EPA, *Reference News Release: EPA Settles PFOA Case Against DuPont for Largest Environmental Administrative Penalty in Agency History* (Dec. 14, 2005), [https://19january2021snapshot.epa.gov/enforcement/reference-news-release-epa-settles-pfoa-case-against-dupont-largest-environmental\\_.html](https://19january2021snapshot.epa.gov/enforcement/reference-news-release-epa-settles-pfoa-case-against-dupont-largest-environmental_.html).

<sup>157</sup> Lisa Sorg, *Feds Drop Criminal Case Involving Chemours, Clean Water Act, NC Newslines* (May 18, 2020), <https://nnewslines.com/briefs/feds-drop-criminal-case-involving-chemours-clean-water-act/>.



*Source: Center for Environmental Health*

CCF urges the SR on Toxics to press industry and government actors with particular vigor vis-à-vis their ongoing violations of the human right to information, as this foundational right is predicate to North Carolinians' exercise of other rights relating to freedom from toxic exposures.

### Right to Access to Justice and an Effective Remedy

*"[Chemours] should be informing everyone in the entire basin, regardless of what is required under the [2019 DEQ] consent order, and actively reaching out to sample all public and private wells and providing clean drinking water while the samples are being analyzed; that's the least any good neighbor would do."*

- Dana Sargent, Executive Director of Cape Fear River Watch<sup>158</sup>

#### A. Nature of the Right

The ICCPR guarantees victims of human rights violations an effective remedy.<sup>159</sup> As a party to the Covenant,<sup>160</sup> the U.S. must "ensure that any person claiming such a remedy shall

<sup>158</sup> As quoted in Greg Barnes, *Forever chemical found in Cumberland County wells 25 miles from Chemours*, N.C. HEALTH NEWS (Mar. 19, 2022), <https://www.northcarolinahealthnews.org/2022/03/19/pfas-found-in-cumberland-county-wells-25-miles-from-chemours/> (quoting Dana Sargent (Cape Fear River Watch)).

<sup>159</sup> U.N. General Assembly, ICCPR, *supra* n.100. Pt.II, Art. 2(b).

<sup>160</sup> UN Treaty Body Database, *Ratification Status for CCPR - International Covenant on Civil and Political Rights*, UNITED NATIONS OFFICE OF THE HIGH COMMISSIONER FOR HUMAN RIGHTS, [https://tbinternet.ohchr.org/\\_layouts/15/TreatyBodyExternal/Treaty.aspx?Treaty=CCPR&Lang=en](https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?Treaty=CCPR&Lang=en).



have his right thereto determined by competent judicial, administrative or legislative authorities[.]”<sup>161</sup> Principle 26 of the U.N. Guiding Principles on Business further obligates states to “take appropriate steps to ensure the effectiveness of domestic judicial mechanisms when addressing business-related human rights abuses.”<sup>162</sup> This may include “considering ways to reduce legal, practical and other relevant barriers that could lead to a denial of access to remedy.”<sup>163</sup>

## B. Evidence of Violations

The U.S. legal system poses high barriers to judicial relief for hundreds of thousands of North Carolinians whose health and lives have been compromised by PFAS exposure. These extend beyond the usual impediments to litigation, including time and psychic costs and lack of affordable access to representation: challenges of proof in toxic tort cases mean that toxic injuries are, as a category, substantially undercompensated in the United States.<sup>164</sup> Plaintiffs or would-be plaintiffs’ frequent inability to prove the fact of their chemical exposure, and to demonstrate but-for causation of resulting illness, functions in economic terms as a large subsidy to polluters.

Further, short statutes of limitations in tort cases mean that many PFAS-exposed individuals will find their complaints time-barred. In North Carolina, the time limit for filing a personal injury case is three years.<sup>165</sup> With data still near-nonexistent about the identity, toxicity, and health effects of hundreds of the PFAS to which Fayetteville Works has exposed North Carolinians, many will find the litigation clock runs out well before they have any prospect of proving their case.

Here, there is an obvious, surgical legislative fix. Just as Italy in 2015 extended its statute of limitations for prosecuting environmental crime,<sup>166</sup> and the U.S. in 2022 eliminated the statute of limitations for survivors of child sexual abuse,<sup>167</sup> Congress could easily eliminate the statute of limitations for litigating PFAS exposure harms. This would be an important policy statement regarding the immensity of the nation’s PFAS contamination problem, and an expression of American resolve to fix it. At present, however, legal claims for redress from PFAS injuries may well expire before North Carolinians even have the information necessary to litigate them.

Beyond the judicial sphere, Chemours continues to erect political barriers to an effective remedy for those harmed by its chemical products. Its current self-serving narrative is that toxic PFAS chemistry is critical to production of semiconductor chips and other materials essential to

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<sup>161</sup> U.N. General Assembly, ICCPR, *supra* n.100, Pt. II, Art. 2(b).

<sup>162</sup> HR/PUB/11/04, *supra* note 109.

<sup>163</sup> *Id.*

<sup>164</sup> Albert Lin, *Beyond Tort: Compensating Victims of Environmental Toxic Injury*, 78 S. Cal. L. Rev 1439 (2005) (stating that with respect to toxic harms, “the difficulty of identifying potential defendants and proving causation . . . leaves social costs externalized and victims uncompensated”). N.C.G.S. Sec. 1-52(16).

<sup>165</sup> N.C.G.S. § 1-52(16).

<sup>166</sup> Marcos A. Orellana, *Visit to Italy*, *supra* n.26, at 3; HRC, A/HRC/51/35/Add. 2 (July 13, 2022).

<sup>167</sup> Ty Ross, *POTUS DELIVERS: Biden Signs Law Eliminating Statute of Limitations for Survivors of Child Sexual Abuse*, OccupyDemocrats.com (Sept. 20, 2022), <https://occupydemocrats.com/2022/09/20/potus-delivers-biden-signs-law-eliminating-statute-of-limitations-for-survivors-of-child-sexual-abuse/>.

the new green economy.<sup>168</sup> For example, in a “sponsored article” in *Politico* in March 2022—*i.e.*, a long-form corporate advertisement deceptively formatted to resemble actual reporting—Chemours lauds PFAS as the “key to unlocking U.S. dominance through the energy transition.”<sup>169</sup> However, any claim that American’s industrial progress *requires* large-scale production of PFAS is hard to square with the EPA Administrator’s recent diagnosis of PFAS contamination as “one of the most pressing environmental and public health concerns of our modern world.”<sup>170</sup>

A more accurate narrative, which the Toxics SR is well positioned to elevate, is that Chemours is offering Americans a false choice. The goal of reshoring and expanding domestic chip production in fact presents the ideal opportunity to invest in safe alternative technologies, as experts in green chemistry have explained.<sup>171</sup> Related, the recently enacted CHIPS Act presents the perfect vehicle for focusing federal infrastructure investment on green energy solutions that protect human health and the environment in the Cape Fear River area and beyond.<sup>172</sup>

## CONCLUSION

The SR on Toxics has written that “[t]he toxification of our planet and bodies constitutes what is arguably one of the most underappreciated threats to the ability of present and future generations to enjoy their human rights to life, health and a life with dignity.”<sup>173</sup> The pervasive toxification of human bodies and the ecosystem of the lower Cape Fear River watershed with PFAS that persist essentially *forever* lends particular urgency to controlling these toxics at their source. We urge the SR to use his full powers of investigation and exhortation to challenge government and corporate leaders to honor and protect North Carolinians’ basic human rights.

## REQUEST FOR SPECIAL PROCEDURES ACTION

Clean Cape Fear is gravely concerned about the proposed Chemours expansion at the Fayetteville Works plant in North Carolina, the crisis of ongoing toxic PFAS exposures to residents of the lower Cape Fear River watershed, and DuPont/Chemours’ unremediated contamination of the Cape Fear River ecosystem. CCF urgently requests intervention by the SR on Toxics, to (a) publicly acknowledge and spread awareness of the violations of human rights for residents in the lower Cape Fear watershed, at the hands of DuPont and Chemours, and with the acquiescence of federal and state regulators and legislators; (b) issue letters of allegation to private, state, and federal perpetrators of human rights violations; and (c) prepare a report on this environmental human rights crisis, to advance the goals below.

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<sup>168</sup> Sharon Lerner, *Chemours Claims Toxic PFAS Chemical GenX Protects the Climate*, THE INTERCEPT (Apr. 11, 2022), <https://theintercept.com/2022/04/11/pfas-genx-chemours-climate-crisis/>.

<sup>169</sup> Chemours Co., *Supporting the US’s energy transition*, POLITICO LLC (Mar. 30, 2022), <https://www.politico.com/sponsor-content/2022/03/30/supporting-the-uss-energy-transition>.

<sup>170</sup> Administrator Michael Regan, *Remarks for the PFAS Drinking Water Standard Event, As Prepared for Delivery*, Environmental Protection Agency, Speeches (March 14, 2023).

<sup>171</sup> See Arlene Blum, *Potential harms of Biden’s microchip boom*, THE HILL (December 15, 2022); see also Karen Angelo, *“Forever Chemicals” Replaced in Materials Used by Semiconductor Industry*, UMASS Lowell (Oct. 26, 2022).

<sup>172</sup> *FACT SHEET: CHIPS and Science Act Will Lower Costs, Create Jobs, Strengthen Supply Chains, and Counter China*, THE WHITE HOUSE (Aug. 9, 2022) <https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/09/fact-sheet-chips-and-science-act-will-lower-costs-create-jobs-strengthen-supply-chains-and-counter-china/>.

<sup>173</sup> U.N. General Assembly, A/74/480, *supra* n.81, at 5.

## RELIEF THAT CLEAN CAPE FEAR SEEKS

Through consultation with affected individuals in the Cape Fear River area, and building upon the work of local, state, and national allies in advocacy to protect North Carolinians and all Americans from further PFAS-related harms, Clean Cape Fear identifies the following priorities (listed from urgent to longer-term) as requested subjects for SR communications to business and government actors:

### 1. STOP THE EXPANSION OF FAYETTEVILLE WORKS.

- a. Chemours should withdraw its application to expand PFAS production at Fayetteville Works.
- b. DEQ should deny any Chemours permit application for facility expansion, using its permissive authority under North Carolina’s Administrative Code to deny facility permits that would cause air pollution or surface water, and its mandatory authority to deny permits that would allow unregulated contaminants to enter groundwater.<sup>174</sup>

### 2. ENSURE CLEAN WATER FOR ALL AFFECTED COMMUNITY MEMBERS.

- a. Chemours must pay for all individuals receiving water that Fayetteville Works has contaminated with PFAS to receive reverse osmosis filters and new water heaters to protect them from further PFAS exposure in their homes.<sup>175</sup> Chemours must also pay to maintain and as needed, replace these devices for a minimum of 40 years, equal to the amount of time that DuPont and Chemours have exposed area residents to PFAS.
- b. Chemours must pay for immediate provision of bottled water, water delivery service, and/or water vouchers, to all PFAS-affected homeowners and renters irrespective of whether their tap water is sourced from a private well or the Cape Fear River until long-term pollution control devices are installed at home or at utility scale.<sup>176</sup>
- c. Chemours must pay for, or reimburse the cost of, testing of private wells for all property owners whose wells are within the radius of the outermost well known to be PFAS-contaminated, irrespective of those wells’ present uses.
- d. Chemours must fund, or reimburse public water utilities for, the cost of past and future treatment plant upgrades necessary to filter PFAS out of “raw” (*i.e.*, input) water and provide safe “finished” (*i.e.*, output) water to utility customers.

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<sup>174</sup> See 15A NCAC 02Q.0308 (DEQ “may deny” a permit when necessary to support state air quality goals and uphold the purposes of the federal Clean Air Act; 15A NCAC 02Q.0518 (DEQ “may deny” a permit when necessary to support state water quality goals and uphold the purposes of the federal Clean Water Act; NCAC 2L.0202(c) (stating that with respect to groundwater, “substances that are not naturally occurring and for which no standard is specified...shall not be permitted in concentrations at or above the practical quantitation limit . . . .”) (emphasis added).

<sup>175</sup> *Nix v. Chemours*, *supra* n.10.

<sup>176</sup> *Id.*

### 3. CONDUCT AN EPIDEMIOLOGICAL STUDY OF HEALTH IMPACTS SPECIFIC TO THE LOWER CAPE FEAR RIVER COMMUNITY.

- a. DuPont and Chemours must fund a large, independent, scientifically rigorous set of epidemiologic studies, modeled on the C-8 Science panel's work, to determine which health conditions in the Cape Fear River watershed are traceable to exposure to PFAS that were once or are still produced at Fayetteville Works.<sup>177</sup>
- b. EPA must use its TSCA authority to compel such a study, and/or collaborate with ATSDR to ensure the conduct of such a study pursuant to CERCLA.

### 4. MAKE CORPORATE POLLUTERS PAY THE COST OF PFAS CLEAN UP AND PFAS HEALTH HARMS, AND FUND AGENCIES' RELATED REGULATORY AND ENFORCEMENT FUNCTIONS.

- a. EPA should designate PFAS *as a class* as "hazardous substances" under both CERCLA and RCRA, to expand polluters' liability for PFAS clean-up costs, and to ensure the cradle-to-grave tracking that will facilitate safe PFAS disposal.
- b. The North Carolina legislature should advance polluter-pays legislation.<sup>178</sup> Although this legislation has bipartisan support, it has been shamefully obstructed by the North Carolina Chamber of Commerce.<sup>179</sup> The legislature should also adequately fund DEQ's PFAS-related permitting, regulatory, and enforcement functions.
- c. Congress should eliminate any applicable federal statutes of limitations, and supplant and preempt state statutes of limitations, for civil litigation and criminal enforcement actions related to PFAS, given the "forever" nature of the chemicals' harms, and the present paucity of data with which to prove these harms in court.

### 5. PROVIDE INFORMATION AND PROMOTE TRANSPARENCY

- a. EPA should use its TSCA authority to require DuPont and Chemours to identify each and every PFAS type and quantity ever produced at Fayetteville Works, and to generate and make public data on the toxicity, environmental fate and transport, and human and ecological effects of these chemicals. Especially important will be information on recently synthesized ultra-short-chain PFAS (involving chains of 2 to 5 carbon atoms), for which near-zero public data exists. EPA should fast-track studies of the specific PFAS detected in local residents' blood for which there exists little or no toxicity data.
- b. DEQ and EPA should (re)initiate criminal investigations of DuPont and Chemours' fraud under relevant legal authorities, including but not limited to laws relating to consumer protection and unfair competition.

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<sup>177</sup> *Id.*

<sup>178</sup> North Carolina House Bill 1095 ("PFAS Pollution and Polluter Liability," <https://www.ncleg.gov/BillLookup/2021/H1095>), which had bipartisan sponsors, would do much to support CCF's polluter-pays goals. See Zach Bright, *State Polluter-Pays Bills Aim to Make Companies Cover PFAS Harms* (June 27, 2022), <https://news.bloomberglaw.com/environment-and-energy/state-polluter-pays-bills-aim-to-make-companies-cover-pfas-harms> (describing the bill's main features).

<sup>179</sup> Zach Bright, *supra* n.178.

**6. REGULATE PFAS AS A CHEMICAL CLASS; BAN NON-ESSENTIAL USES OF PFAS; AND DEVELOP SAFE SUBSTITUTES FOR FUNCTIONALLY USEFUL PFAS THROUGH GREEN CHEMISTRY AND GREEN ENGINEERING.**

- a. EPA's program units, and specifically its Office of Chemical Safety and Pollution Prevention, should presume existing and new PFAS *as a class* to be guilty until proven innocent, rather than the reverse, given all that is known about fluorochemical toxicity, bioaccumulation, environmental mobility, and persistence.
- b. EPA's TSCA program should embrace the European Union concept of “essential uses” of chemicals, which recognizes that where chemicals are known or suspected to pose risks, it is socially appropriate to inquire as to the *necessity* of their market introduction or continued use. Scholars have noted that PFAS are the exemplar chemical class warranting a restriction to “essential uses.”<sup>180</sup>
- c. EPA should, through agency research, grantmaking, and challenge awards, accelerate efforts to develop safe alternatives to functionally useful PFAS through application of the principles of green chemistry and green engineering. Given the critical technology-forcing role of regulation in spurring innovation, such efforts must complement rather than substitute for direct regulation.

**7. TAKE SUCH ADDITIONAL ACTIONS AS ARE NECESSARY TO MITIGATE HARMS FROM PFAS CONTAMINATION IN NORTH CAROLINA.**

- a. DEQ should consult with local residents to identify additional opportunities to mitigate harm to individuals, families, and communities from the pervasive PFAS contamination in the lower Cape Fear River watershed. Useful measures that CCF's advocacy allies have identified include both website and place-based warnings regarding the dangers of consuming PFAS-laden fish and game, on which DEQ could collaborate with the state's Wildlife Resources Commission.



**Lawn sign near Fayetteville Works.**  
*Photo: UC Berkeley Environmental Law Clinic.*

<sup>180</sup> Kathleen Garnett & Geert Van Calster, *The Concept of Essential Use: A Novel Approach to Regulating Chemicals in the European Union*, 10 *TRANSNATIONAL ENVIRONMENTAL LAW* 159 (Mar. 2021), <https://www.cambridge.org/core/journals/transnational-environmental-law/article/concept-of-essential-use-a-novel-approach-to-regulating-chemicals-in-the-european-union/E28E6A1A716C1E4E536FFD9E733FC09A>.

Clean Cape Fear's conversations with community members, water providers, and other concerned citizens during a recent tour of the lower Cape Fear River watershed confirmed that PFAS are equal-opportunity toxics, harming Republicans, Democrats, Independents, and non-voters alike.



Residents from across the political spectrum gather on a North Carolina porch to discuss their sense of political abandonment, as they stockpile bottled water to avoid further ingestion of PFAS.

*Photo: UC Berkeley Environmental Law Clinic*

Where these groups are now united by their shared suffering, an intervention by the SR holds great potential for making the companies responsible for and the agencies acquiescent in environmental human rights violations, and PFAS-affected parties, joint participants in solutions. Clean Cape Fear and its counsel stand ready to assist the SR in this effort.

Cc:

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