IN THE SUPERIOR COURT OF THE DISTRICT OF COLUMBIA CIVIL DIVISION

DISTRICT OF COLUMBIA, a municipal corporation, 441 4th Street NW, Washington, D.C. 20001,	Case No.:
Plaintiff,	Judge:
v.	JURY TRIAL DEMANDED
THE 3M COMPANY 3M Center St. Paul, MN 55119,	
AGC CHEMICALS AMERICAS, INC. 5 East Uwchlan Avenue, Ste. 201, Exton, PA 19341,	
AMEREX CORPORATION 7595 Gasden Highway, Trussville, AL 35173,	
ARCHROMA U.S. INC. 5435 77 Center Drive, Charlotte, NC 28217,	
ARKEMA, INC. 900 First Avenue, King of Prussia, PA 19406,	
BASF CORPORATION 100 Park Avenue, Florham Park, NJ 07932,	
BUCKEYE FIRE EQUIPMENT COMPANY 110 Kings Road, Kings Mountain, NC 28086,	
CARRIER FIRE & SECURITY AMERICAS CORPORATION, f/k/a UTC	

Fire & Security Americas Corporation

13995 Pasteur Boulevard, Palm Beach Gardens, FL 33418-7231

CARRIER FIRE & SECURITY CORPORATION, f/k/a UTC Fire &

Security Corporation 13995 Pasteur Boulevard, Palm Beach Gardens, FL 33418-7231

CARRIER GLOBAL CORPORATION

13995 Pasteur Boulevard, Palm Beach Gardens, FL 33418-7231

CHEMDESIGN PRODUCTS INC.

2 Stanton Street, Marinette, WI 54143,

CHEMGUARD, INC.

1 Stanton Street, Marinette, WI 54143-2542,

CHEMICALS, INC.

12321 Hatcherville Road, Baytown, TX 77520,

THE CHEMOURS COMPANY,

1007 Market Street, P.O. Box 2047 Wilmington, DE 19899,

THE CHEMOURS COMPANY FC, LLC

1007 Market Street P.O. Box 2047 Wilmington, DE 19899,

CLARIANT CORPORATION

4000 Monroe Road, Charlotte, NC 28205,

CORTEVA, INC.,

P.O. Box 80735 Chestnut Run Plaza 735 Wilmington, DE 19805,

DEEPWATER CHEMICALS INC.

196122 E County Rd. 40,

Woodward, OK 73801,

DUPONT DE NEMOURS, INC.,

974 Centre Road, Wilmington, DE 19805,

DYNAX CORPORATION

79 Westchester Avenue, Pound Ridge, NY 10576,

E.I. DU PONT DE NEMOURS AND COMPANY,

974 Centre Road, Wilmington, DE 19805,

FIRE SERVICE PLUS, INC.

473 Dividend Drive, Peachtree City, GA 30269,

NATION FORD CHEMICAL COMPANY

2300 Banks Street, Fort Mill, SC 29715,

NATIONAL FOAM, INC.

141 Junny Road, Angier, NC 27501,

TYCO FIRE PRODUCTS LP

1 Stanton Street, Marinette, WI 54143-2542,

JOHN DOE DEFENDANTS 1-10,

Defendants.

COMPLAINT FOR ENVIRONMENTAL DAMAGES

Plaintiff District of Columbia (the "District") brings this action against the 3M Company ("3M"); Tyco Fire Products LP ("Tyco"); Chemguard, Inc ("Chemguard"); Buckeye Fire Equipment Company ("Buckeye"); Carrier Fire & Security Americas Corporation; Carrier Fire & Security Corporation; Carrier Global Corporation ("Carrier Global"); Fire Service Plus, Inc.

("Fire Service Plus"); Amerex Corporation ("Amerex"); Arkema, Inc. ("Arkema"); BASF Corporation ("BASF"); ChemDesign Products Inc. ("ChemDesign"); Chemicals, Inc.; Corteva, Inc. ("Corteva"); Deepwater Chemicals, Inc. ("Deepwater"); DuPont de Nemours Inc. ("New DuPont"); Nation Ford Chemical Company ("Nation Ford"); AGC Chemicals Americas, Inc. ("AGC Chemicals"); Dynax Corporation ("Dynax"); Clariant Corporation ("Clariant"); E. I. du Pont de Nemours and Company ("Old DuPont"); National Foam, Inc. ("National Foam"); The Chemours Company ("Chemours"); The Chemours Company FC, LLC ("Chemours FC"); Archroma U.S., Inc. ("Archroma"); and John Doe Defendants 1 through 10 (Names Fictitious) (collectively, "Defendants"), to recover all available remedies in both law and equity owed to the District due to Defendants' violations of law. In support of its claims, the District states as follows:

INTRODUCTION

- 1. For decades, Defendants manufactured, marketed, distributed, and sold aqueous film-forming foam ("AFFF") or its component fluorochemicals and fluorosurfactants containing per- and polyfluoroalkyl substances ("PFAS") (collectively, "AFFF Products"). Despite knowing that when used as directed AFFF releases toxic PFAS chemicals into the environment, and despite knowing that PFAS pose significant threats to the environment and human health, Defendants continued to manufacture, market, distribute, and sell AFFF Products—and they did so without warning the public, and without taking any steps to modify their products to avoid these harms.
- 2. As Defendants were fully aware, PFAS contamination is devastating to the environment. When AFFF is released, PFAS quickly migrate from soil to surface water and groundwater, entering drinking water supplies. These chemicals then wreak havoc at each level

of the food chain, building up in plants, fish, wildlife, and eventually humans. These chemicals then continue their migratory cycle in the environment by being transported through wastewater and biosolids.

- 3. PFAS contamination also poses serious threats to human health. Research has linked human PFAS exposure to increased cholesterol levels, liver damage or changes in liver function, decreases in body vaccine response, increased risk of high blood pressure or preeclampsia in pregnant women, lower infant birth weights, and higher risks of kidney and testicular cancer.
- 4. Defendants' AFFF Products have been stored and released in areas within and adjacent to the District. Because of Defendants' reckless and unlawful conduct, the District's drinking water and natural resources—including its groundwater, surface water, soil, plants and animal life—are contaminated with toxic PFAS chemicals.
- 5. Because of the environmental and health hazards posed by PFAS, the District has incurred, and will continue to incur, significant costs to investigate and remediate the harms posed by PFAS contamination. The District of Columbia Water and Sewer Authority ("DC Water"), which treats and distributes drinking water in the District and manages the District's wastewater and biosolids, has also expended and will continue to expend significant resources to address PFAS contamination in the District's drinking water, wastewater, and biosolids.
- 6. As a result of their conduct and the harms they have caused, Defendants are liable for: creating a public nuisance (Count 1); designing defective products (Count 2); failing to warn about the dangers their products posed (Count 3); and negligently releasing and distributing their products in the marketplace (Count 4). Old DuPont and its related entities, Corteva, Chemours,

and New DuPont, are also liable for fraudulently transferring assets to avoid having to pay for the harms they have caused and continue to cause (Counts 5-8).

7. The District brings this action to hold Defendants accountable for the harms they have caused. It seeks recovery of the costs necessary: (1) to fully investigate, remediate, treat, assess, and restore the District's lands, waters, sediments, biota, and other natural resources; (2) to monitor and treat PFAS in the District's stormwater discharges; and (3) for DC Water to monitor and treat PFAS in drinking water, wastewater, and biosolids. The District also seeks damages, including property damages, economic damages, restitution, and punitive damages, and all other fees, costs, and equitable relief to which the District and DC Water are entitled.

PARTIES

- A. Plaintiff
- 8. The District of Columbia (the "District") is a municipal corporation empowered to sue and be sued, and serves as the local government for the territory constituting the permanent seat of the federal government. The District is represented by and through its chief legal officer, the Attorney General for the District of Columbia. The Attorney General has general charge to conduct all legal business and lawsuits on behalf of the District and is responsible for upholding the public interest. D.C. Code § 1-301.81(a)(1).
- 9. The District also brings claims assigned to it by the District of Columbia Water and Sewer Authority ("DC Water"). DC Water is a corporate body established by the Water and Sewer Authority Establishment and Department of Public Works Reorganization Act of 1996, as amended, effective April 18, 1996 (DC Law 11-111; D.C. Code § 34-2202.01 *et seq.*). It is charged with planning, designing, constructing, operating, maintaining, regulating, financing, repairing, modernizing, and improving water distribution and sewage collection, treatment, and disposal within the District and portions of Maryland and Virginia.

- B. <u>AFFF Defendants</u>
- 10. This section sets forth Defendants who manufactured and sold AFFF. Some AFFF Defendants also manufactured and sold fluorochemicals for producing AFFF, as indicated below.
- 11. **Defendant 3M Company ("3M")** is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business located at 3M Center, St. Paul, MN 55144-1000. From the mid-1960s through 2002, 3M designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including perfluorooctane sulfonic acid ("PFOS") and perfluorooctanoic acid ("PFOA") and/or their chemical precursors, in the United States under the brand name "Light Water." 3M also sold fluorochemicals containing PFAS, including PFOS and PFOA and/or their chemical precursors, for use in manufacturing the fluorosurfactants used in AFFF Products in the United States.
- 12. **Defendant Tyco Fire Products LP ("Tyco")** is a limited partnership organized under the laws of the State of Delaware, with its principal place of business located at One Stanton Street, Marinette, WI 54143-2542. Tyco is the successor in interest of the Ansul Company ("Ansul"), having acquired Ansul in 1990. Beginning in 1975, Ansul designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including PFOA and/or its chemical precursors, under the brand name "Ansulite." After Tyco acquired Ansul in 1990, Tyco/Ansul have continued to design, manufacture, market, distribute, and sell AFFF Products containing PFAS, including PFOA and/or its chemical precursors, in the United States.
- 13. **Defendant Chemguard, Inc. ("Chemguard")** is a corporation organized under the laws of the State of Texas, with its principal place of business located at One Stanton Street, Marinette, WI 54143-2542. Since 1992, Chemguard has designed, manufactured, marketed, distributed, and sold AFFF Products containing PFAS, including PFOA and/or its chemical

precursors, under the brand name "Chemguard." Chemguard was acquired by Tyco in 2011 and Tyco/Chemguard have continued to design, manufacture, market, distribute, and sell AFFF Products containing PFAS, including PFOA and/or its chemical precursors, in the United States.

- 14. Chemguard acquired Ciba Specialty Chemical Corporation's ("Ciba") fluorosurfactants business in 2003. Ciba/Chemguard designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFAS, including PFOA and/or its chemical precursors, for use in AFFF Products in the United States.
- 15. **Defendant Buckeye Fire Equipment Company ("Buckeye")** is a corporation organized under the laws of the State of Ohio, with its principal place of business located at 110 Kings Road, Kings Mountain, NC 28086. From around 2003 to 2017, Buckeye designed, manufactured, marketed, distributed, and sold AFFF Products containing PFAS, including PFOA and/or its chemical precursors, under brand names including "Buckeye Platinum" in the United States.
- 16. **Defendant National Foam, Inc. ("National Foam")** is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 141 Junny Road, Angier, NC 27501. In 1973, National Foam started designing, manufacturing, marketing, distributing, and selling AFFF containing PFAS, including PFOA and/or its chemical precursors.
- 17. National Foam merged with Chubb Fire Ltd. to form Chubb National Foam, Inc. in or around 1988. Chubb National Foam, Inc. is or has been composed of different subsidiaries and/or divisions, including but not limited to, Chubb Fire & Security Ltd., Chubb Security, PLC, Red Hawk Fire & Security, LLC, and/or Chubb National Foam, Inc. (collectively referred to as "Chubb").

- 18. Chubb was acquired by Williams Holdings in 1997. On information and belief, Angus Fire Armour Corporation ("Angus") had previously been acquired by Williams Holdings in 1994. On information and belief, Williams Holdings was demerged into Chubb and Kidde P.L.C. in or around 2000. When Williams Holdings was demerged, Kidde P.L.C. became the successor in interest to National Foam and Angus. Kidde P.L.C. was acquired by United Technologies Corporation in or around 2005. Angus and National Foam separated from United Technologies Corporation in or around 2013.
- 19. National Foam under its own name and/or as Chubb and/or Angus has designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including PFOA and/or its chemical precursors, from around 1973 through present in the United States under brand names including "Angus," "Aer-O-Lite," "Aer-O-Water," "Universal," and "Centurion."
- 20. **Defendant Carrier Global Corporation ("Carrier Global")** is a corporation organized under the laws of the State of Delaware, with its principal place of business at 13995 Pasteur Boulevard, Palm Beach Gardens, FL 33418-7231. On information and belief, Carrier Global was formed in March 2020 when United Technologies Corporation spun off its fire and security business before it merged with Raytheon Company in April 2020. Carrier Global is the ultimate corporate parent and owner or Kidde-Fenwal, Inc ("Kidde"), Carrier Fire & Security Americas Corporation, and Carrier Fire & Security Corporation.
- 21. Kidde was an operating subsidiary of Kidde P.L.C. and designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including PFOA and/or its chemical precursors, in the United States following Kidde P.L.C.'s acquisition by United Technologies Corporation in 2005 through 2013 when Kidde divested the AFFF business unit to National Foam. On information and belief, Carrier Global assumed liability for certain PFAS liabilities

from its predecessor United Technology Corporation, including liability related to its subsidiary Kidde.¹

- 22. **Defendant Carrier Fire & Security Americas Corporation** is a corporation organized under the laws of the State of Delaware, with its principal place of business at 13995 Pasteur Boulevard, Palm Beach Gardens, FL 33418-7231. On information and belief, Carrier Fire & Security Americas Corporation is a wholly owned subsidiary of Carrier Global, which wholly owns the holding company Kidde-Fenwal Protection, Inc., which wholly owns Kidde.
- 23. **Defendant Carrier Fire & Security Corporation** is a corporation organized under the laws of the State of Delaware, with its principal place of business at 13995 Pasteur Boulevard, Palm Beach Gardens, FL 33418-7231. On information and belief, Carrier Fire & Security Corporation wholly owns Kidde-US Holdings Inc., a holding company organized under the State of Delaware, which wholly owns Carrier Fire & Safety Americas Corporation.
- 24. **Defendant Fire Service Plus, Inc. ("Fire Service Plus")** is a corporation organized under the laws of the State of Georgia, with its principal place of business at 473 Dividend Drive, Peachtree City, GA 30269. Since around 2014, Fire Service Plus has designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including PFOA and/or its chemical precursors, in the United States under the brand name "FireAde."
- 25. **Defendant Amerex Corporation ("Amerex")** is a corporation organized and existing under the laws of the State of Alabama, with its principal place of business located at 7595 Gadsden Highway, Trussville, AL 35173. In 2011, Amerex acquired Solberg Scandinavian AS, one of the largest manufacturers of AFFF Products in Europe. On information and belief, since 2011, Amerex has designed, manufactured, marketed, distributed, and sold AFFF

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¹ Kidde-Fenwal, Inc. has since filed for bankruptcy.

containing PFAS, including PFOA and/or its chemical precursors, in the United States under the brand name Amerex.

- *C.* Fluorosurfactant and Fluorochemical Defendants
- 26. This section sets forth Defendants that designed, manufactured, marketed, distributed, and sold fluorochemicals and fluorosurfactants used to make AFFF but did not separately design, manufacture, market, distribute, or sell AFFF.
- 27. **Defendant Dynax Corporation ("Dynax")** is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 103 Fairview Park Drive, Elmsford, NY 10523. Dynax entered into the PFAS chemical market on or about 1991 and quickly became a leading global producer of fluorosurfactants and fluorochemical stabilizers containing PFAS, including PFOA, and/or its chemical precursors. Since 1991, Dynax has designed, manufactured, marketed, distributed, and sold fluorosurfactants and fluorochemical stabilizers containing PFAS, including PFOA, and/or its chemical precursors, for use in AFFF Products in the United States.
- 28. **Defendant Arkema, Inc.** ("Arkema") is a corporation organized and existing under the laws of Pennsylvania, with its principal place of business at 900 First Avenue, King of Prussia, PA 19406. Arkema is an operating subsidiary of Arkema France S.A. Arkema is a successor in interest to Atochem North America Inc., Elf Atochem North America, Inc., and Atofina Chemicals, Inc. Arkema and/or its predecessors designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFAS, including PFOA, and/or its chemical precursors, for use in AFFF Products in the United States.
- 29. **Defendant BASF Corporation ("BASF")** is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 100 Park Avenue, Florham Park, NJ 07932. BASF is the successor in interest to Ciba. Inc. (f/k/a Ciba Specialty

Chemicals Corporation). Ciba Inc. designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF Products.

- 30. **Defendant ChemDesign Products Inc.** ("ChemDesign") is a corporation organized under the laws of Delaware, with its principal place of business located at 2 Stanton Street, Marinette, WI 54143. On information and belief, ChemDesign designed, manufactured, marketed, distributed, and sold fluorosurfactants and/or fluorochemicals containing PFOA, and/or its chemical precursors, for use in AFFF Products in the United States.
- 31. **Defendant AGC Chemicals Americas, Inc.** ("AGC") is a corporation organized under the laws of Delaware, with its principal place of business at 55 East Uwchlan Avenue, Suite 201, Exton, PA 19341. AGC was formed in 2004 and is a subsidiary of AGC Inc., a foreign corporation organized under the laws of Japan, with its principal place of business in Tokyo, Japan.
- 32. On information and belief, AGC designed, manufactured, marketed, distributed, and sold fluorochemicals containing PFAS, including PFOA and/or its chemical precursors, for use in manufacturing the fluorosurfactants used in AFFF Products in the United States.
- 33. **Defendant Archroma U.S., Inc. ("Archroma")** is a corporation organized under the laws of Delaware, with its principal place of business at 5435 77 Center Drive, Charlotte, NC 28217. Archroma was formed in 2013 when Clariant Corporation divested its textile chemicals, paper specialties, and emulsions business to SK Capital Partners. On information and belief, Archroma designed, manufactured, marketed, distributed, and sold fluorochemicals containing PFAS, including PFOA and/or its chemical precursors, for use in manufacturing the fluorosurfactants used in AFFF Products in the United States.

- 34. **Defendant Chemicals, Inc.** is a corporation organized and existing under the laws of Texas, with its principal place of business located at 12321 Hatcherville, Baytown, TX 77520. On information and belief, Chemicals, Inc. supplied fluorochemicals containing PFAS, including PFOA and/or its chemical precursors, for use in manufacturing the fluorosurfactants used in AFFF Products in the United States.
- 35. **Defendant Clariant Corporation ("Clariant")** is a corporation organized and existing under the laws of New York, with its principal place of business at 1600 West Hill Street, Louisville, KY 40210. Clariant is the successor in interest to the specialty chemicals business of Sandoz Chemical Corporation ("Sandoz"). Sandoz spun off its specialty chemicals business to form Clariant in 1995. On information and belief, Clariant supplied fluorochemicals containing PFAS, including PFOA and/or its chemical precursors, for use in manufacturing the fluorosurfactants used in AFFF Products in the United States.
- 36. **Defendant Nation Ford Chemical Co. ("Nation Ford")** is a corporation organized and existing under the laws of South Carolina, with its principal place of business located at 2300 Banks Street, Fort Mill, SC 29715. On information and belief, Nation Ford supplied fluorochemicals containing PFAS, including PFOA and/or its chemical precursors, for use in manufacturing the fluorosurfactants used in AFFF Products in the United States.
- 37. **Defendant Deepwater Chemicals, Inc. ("Deepwater")** is a corporation organized under the laws of Delaware, with its principal place of business located at 196122 E County Road 40, Woodward, OK 73801. On information and belief, Deepwater designed, manufactured, marketed, distributed, and sold fluorosurfactants and/or fluorochemicals containing PFAS, including PFOA and/or its chemical precursors, for use in AFFF Products in the United States.

- 38. **Defendant E.I. du Pont de Nemours and Company ("Old DuPont")** is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 974 Centre Road, Wilmington, DE 19805. On information and belief, Old DuPont is the successor in interest to DuPont Chemical Solutions Enterprise. Old DuPont has designed, manufactured, marketed, and sold fluorosurfactants containing PFAS, including PFOA and/or its chemical precursors, for use in AFFF Products in the United States.
- 39. **Defendant The Chemours Company ("Chemours")** is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 1007 Market Street, Wilmington, DE 19899. In 2015, Old DuPont spun off its performance chemicals business to Chemours, along with vast environmental liabilities, including those related to PFAS. Chemours has designed, manufactured, marketed, and sold fluorosurfactants containing PFAS, including PFOA and/or its chemical precursors, for use in AFFF Products in the United States.
- 40. **Defendant The Chemours Company FC, LLC ("Chemours FC")** is a limited liability company organized under the laws of the State of Delaware, with its principal place of business located at 1007 Market Street, Wilmington, DE 19899. Chemours FC operates as a subsidiary of Chemours Co. and manufactures fluoropolymer resins.
- DuPont") is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business located at 974 Centre Road, Wilmington, DE 19805. In 2015, after Old DuPont spun off Chemours, Old DuPont merged with the Dow Chemical Company ("Old Dow") and transferred Old DuPont's historic assets and liabilities to other entities, including New DuPont. New DuPont does business throughout the United States.

- 42. **Defendant Corteva, Inc. ("Corteva")** is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business located at P.O. Box 80735, Chestnut Run Plaza 735, Wilmington, DE 19805. In 2019, New DuPont spun off a new, publicly traded company, Corteva, which currently holds Old DuPont as a subsidiary. In connection with these transfers, Corteva assumed certain Old DuPont liabilities. Corteva does business throughout the United States.
- 43. The above Defendants Old DuPont, Chemours, Chemours FC, New DuPont, and Corteva are collectively referred to as "DuPont" or "DuPont Defendants" throughout this Complaint.
- 44. **Defendants John Does 1 through 10**: The true names and capacities, whether corporate, associate, partnership, or otherwise, of Defendants sued herein as John Does 1 through 10, inclusive, are unknown to the District. As such, the District references said Defendants by fictitious names. The District alleges that Defendants John Does 1 through 10 are manufacturers of AFFF, manufacturers of PFAS-containing fluorochemicals and/or fluorosurfactants used to make AFFF, and/or distributors of AFFF Products that are in some manner responsible for the District's injuries and losses. The District will seek leave to amend this Complaint to allege the true names of John Does 1 through 10 once they have been ascertained.
- 45. The above Defendants represent all or substantially all of the market for AFFF and PFOA and PFOS component parts in the United States.

JURISDICTION

46. This Court has jurisdiction over the subject matter of this case pursuant to D.C. Code § 11-921.

- 47. This Court has personal jurisdiction over Defendants pursuant to D.C. Code § 13-423(a).
- 48. The natural resources and property that are the subject of this suit rest within the District.

FACTUAL ALLEGATIONS

I. <u>PFAS Are Dangerous Chemicals That Threaten the Environment and Human Health.</u>

- 49. PFAS are a class of thousands of chemicals that include carbon chains containing at least one carbon atom on which some or all hydrogen atoms are replaced by fluorine atoms.

 All PFAS chemicals are entirely manmade and do not occur in nature.
- 50. PFAS have been dubbed "forever chemicals" because they do not readily break down in the environment. The carbon-fluorine bond in PFAS is one of the strongest bonds in chemistry. As a result, PFAS are thermally, chemically, and biologically stable.
- 51. These forever chemicals are also highly mobile. Once these forever chemicals are introduced, they migrate through the surrounding environment through surface water, soil, and groundwater. In short, once introduced in one area, PFAS are likely to contaminate a large area of natural resources and are difficult and costly to remove.
- 52. PFOS and PFOA are two of the most commonly used and studied PFAS chemicals. Research has shown that once even a small amount of PFOA or PFOS enters the soil and surface and ground water, the chemicals can have large impacts on plants, fish, wildlife, and human health. Studies have shown that PFOS and PFOA are passed on to plants through their root systems, where they bioaccumulate (or build up), and then are passed up through the food chain. PFOA and PFOS have also been found to bioaccumulate and persist in fish and wildlife. Organisms secrete these chemicals very slowly, so ongoing exposure to even a very small

amount can result in a build-up of PFOS and PFOA over time. PFOS and PFOA also biomagnify, meaning that their concentration in organic tissue increases as they are consumed up the food chain.

- 53. Important non-occupational routes for PFOS and PFOA human exposure are through ingesting contaminated drinking water and food—for which fish and other seafood contain the highest concentrations. Proximity to a PFOS and/or PFOA contamination site is associated with higher levels of contamination in fish, wildlife, and water. Many biomonitoring studies have shown that PFOS and PFOA in drinking water near contaminated sites are associated with increases in PFOA and PFOS in the blood levels of human populations.
- 54. Moreover, treatment of PFAS contamination, including PFOS and PFOA, in soil and water is both challenging and costly because of PFAS' chemical complexity and stability. Current municipal wastewater treatment systems have been found ineffective in dealing with PFAS. Additionally, PFAS are not removed by conventional drinking water treatment systems.
- 55. PFOS and PFOA exposure are associated with a wide array of harmful and serious health effects such as: (1) adverse reproductive and developmental effects, including pregnancy-induced hypertension, preeclampsia, and decreased birthweight; (2) decreases in antibody response to vaccines; (3) increases in risk of childhood infections; (4) testicular and kidney cancer; and (5) liver damage and high cholesterol.
- 56. More recently, government agencies have started recognizing the human health risks of PFOS and PFOA and provided for increased regulations. In 2016, the National Toxicology Program of the United States Department of Health and Human Services ("NTP") and the International Agency for Research on Cancer ("IARC") both released extensive analyses

of research regarding the adverse effects of fluorochemicals.² The NTP concluded that both PFOA and PFOS are presumed to be an immune hazard to humans.

- 57. The United States Environmental Protection Agency ("EPA") has also recognized the health risks associated with exposure to PFOA and PFOS. In 2016, the EPA established its first health advisory level ("HAL") for combined PFOS and PFOA in drinking water at 70 ppt.³ In June of 2022, the EPA introduced new interim health advisories that significantly lowered the HAL for PFOS and PFOA.⁴ The 2022 HALs for PFOA and PFS are .004 ppt and .02 ppt, respectively. In setting these new interim HALs, the EPA relied on "data and draft analyses that indicate that the levels at which negative health effects could occur are much lower than previously understood when the agency issued its 2016 health advisories for PFOA and PFOS."⁵
- States and water providers will be responsible for monitoring raw and finished water and, if

Id.

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See U.S. Dep't of Health and Human Servs., Nat'l Toxicology Program, NTP Monograph: Immunotoxicity Associated with Exposure to Perfluorooctanoic Acid or Perfluorooctane Sulfonate (Sept. 2016), at 1, 17, 19, available at https://ntp.niehs.nih.gov/ntp/ohat/pfoa_pfos/pfoa_pfosmonograph_508.pdf.

³ Lifetime Health Advisories and Health Effects Support Documents for Perfluorootanic Acid and Perfluorooctane Sulfonate, 81 Fed. Reg. 101, 33250 (May 25, 2016).

⁴ Lifetime Drinking Water Health Advisories for Four Perfluoroalkyl Substances, 87 Fed. Reg. 118, 36848, 36849 (June 21, 2022).

⁵ *Id*.

⁶ EPA Fact Sheet, *EPA's Proposal to Limit PFAS in Drinking Water* (Mar. 2023), at 1, available at https://www.epa.gov/system/files/documents/2023-04/Fact%20Sheet_PFAS_NPWDR_Final_4.4.23.pdf.

Pre-Publication Federal Register Notice: PFAS National Primary Drinking Water Regulation Rulemaking (Mar. 2023), at 2, available at https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas

PFOA and PFOS levels are higher than the MCLs, treating the drinking water and issuing required public notification to consumers.

59. On September 6, 2022, the EPA also initiated a proposed rulemaking to designate PFOA and PFOS as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"). In support of this rulemaking, the EPA stated that "evidence indicates that these chemicals may present substantial danger to public health or welfare or the environment when released into the environment." Once promulgated, States and publicly owned treatment systems will be responsible for controlling the discharge of PFAS, monitoring and treating PFAS in wastewater, and monitoring, treating, and managing the disposal of PFAS-contaminated biosolids.

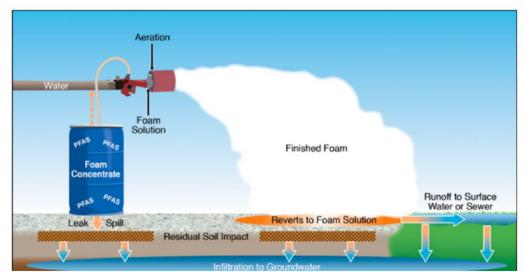
II. AFFF Is Recognized as One of the Largest Contributors to PFAS Contamination.

- 60. PFOS and PFOA and/or their chemical precursors have historically been included in fluorosurfactants used in AFFF. AFFF is a type of Class B firefighting foam specifically formulated using fluorosurfactants to extinguish flammable liquid fires. When applied to a fire, the fluorosurfactants in AFFF provide a film over the fuel surface to isolate it from oxygen and provide protection against re-ignition.
- 61. When AFFF is mixed with water, it forms a foam solution. That foam is then intentionally applied to a surface or on the ground to extinguish a fire or to conduct firefighting training exercises. When AFFF is used as intended, it can cause hundreds, if not thousands, of gallons of water laced with PFAS to enter the environment as well as separate and combined sewer systems.

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Designation of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) as CERCLA
 Hazardous Substances, 87 Fed. Reg. 171, 54415 (Sept. 6, 2022).
 Id. at 54417.

62. The following illustration portrays how AFFF spreads in the environment:



Sourced from the Interstate Technology Regulatory Council at https://pfas-1.itrcweb.org/3-firefighting-foams/#3_1

- 63. At various times from the 1960s through today, Defendants designed, manufactured, marketed, and sold AFFF or its component fluorochemicals and/or fluorosurfactants that contain PFAS. AFFF has been used for decades by the military, commercial airports, municipal fire departments, and other commercial and industrial facilities for fighting and training to fight liquid-based fires. AFFF is one of the largest contributors to PFAS contamination.
- 64. AFFF has routinely been discharged at Department of Defense ("DOD") military sites since the late 1960s. The DOD published military specifications ("MILSPEC") for AFFF beginning in 1969, requiring military bases to use AFFF for firefighting purposes. Soon after, many airports began adopting the use of AFFF; and beginning in 2004, the Federal Aviation Agency ("FAA") has required MILSPEC AFFF to be used at certain commercial airports.

 Because of the repeated and prolonged use of AFFF at military sites and commercial airports, some have argued that these sites should be considered presumptively contaminated by PFAS.

^{11 14} C.F.R. § 139.317.

- 65. In the late 2000s, some manufacturers began developing fluorine-free foam ("F3") or a version of AFFF, referred to as "C6 AFFF" or "current-use AFFF," that uses short-chain PFAS chemicals rather than PFOS and PFOA. In comparison, AFFF that includes PFOA and PFOS is sometimes referred to as "Legacy AFFF" or "C8-AFFF." The rise in current-use AFFF and F3 tracks with increased awareness of the serious health impacts and regulation of long-chain PFAS like PFOS and PFOA.
- 66. In December 2019, Congress passed the National Defense Authorization Act for Fiscal Year 2020 ("2020 NDAA"), which introduced new prohibitions on the use of AFFF for land-based applications. ¹² Section 322 of the Act introduced a timeline for the phasing out of AFFF use by the military. First, the Secretary of the Navy had to publish a new military specification for a fluorine-free fire-fighting agent for use at all military installations by January 31, 2023. Second, DOD organizations will no longer be authorized to purchase AFFF containing more than 1 part per billion of PFAS after October 1, 2023. Third, after October 1, 2024, this prohibition will extend to the use of any PFAS-containing AFFF at any military installation.
- 67. On January 6, 2023, the Defense Logistics Agency within the DOD published a new Military Specification for "Fire Extinguishing Agent, Fluorine-Free Foam (F3) Liquid Concentrate, for Land-Based, Fresh Water Application," MIL-PRF-32725 ("F3 MILSPEC").¹³ This new specification will govern fire-extinguishing foams used by all DOD organizations and will require such foams to have test results showing no detection of PFAS. The specification further requires manufacturers to certify in writing that PFAS has not intentionally been added to the concentrate.

National Defense Authorization Act for Fiscal Year 2020, S. 1790, 116th Congress (Jan. 3, 2019).

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Defense Logistics Agency, *Performance Specification Fire Extinguishing Agent, Fluorine-Free Foam (F3) Liquid Concentrate, for Land-Based, Fresh Water Applications*, Doc. ID: MIL-PRF-32725 (Jan. 6, 2023), available at https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=285047.

- 68. After the F3 MILSPEC was released, the FAA released a CertAlert notifying Aircraft Rescue and Fire Fighting Departments of the new F3 MILSPECS and stating that the FAA will accept use of the new F3 agent to be used at commercial airports once it is added to the Navy's qualified Products' List. However, the FAA allowed airport operators to continue using MILSPEC AFFF that contains PFAS.
- 69. Even with increased regulation, AFFF continues to contribute to significant PFAS contamination. These contaminates persist in the environment and can cause harm to the environment and human health years after being discharged. Additionally, AFFF has an extended shelf life, and may still be applied years after manufacturing has halted.
- 70. The use of AFFF for firefighter training, emergency response, and equipment maintenance has resulted in concentrated PFAS contamination in areas throughout the United States. PFAS contamination is expected wherever AFFF was discharged, including military sites, major airports, fire training areas, and some fire suppression locations.
- 71. Defendants have sold their AFFF Products to military and industrial facilities, airports, commercial and industrial users, and local fire departments Based on information and belief, Defendants' AFFF Products were marketed, sold, or used in the District and adjacent jurisdictions. Based on information and belief, Defendants together controlled all or substantially all of the AFFF Product market in the District and adjacent jurisdictions.
- 72. It has long been recognized that the use of AFFF is associated with many of the highest environmental concentrations of PFOA and PFOS. Landscapes and water systems adjacent to areas of AFFF use often have high levels of PFOA and PFOS in soil, surface water,

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Federal Aviation Administration National Part 139 CertAlert, *New Military Specification for Performance-Based Standards for Fluorine-Free Aircraft Fire Fighting Foam*, No. 23-01 (Jan. 12, 2023), at 2, available at https://www.faa.gov/sites/faa.gov/files/part-139-cert-alert-23-01-F3_3.pdf.

groundwater, drinking water, plants, fish, and wildlife. Unfortunately, this has proven true in the District.

III. The District's Natural Resources are Contaminated by PFAS.

- 73. The District's natural resources have been contaminated by PFOA and PFOS. On information and belief, the contamination to the District's natural resources was caused by the use, release, spill, transport, storage, disposal, and/or handling of Defendants' AFFF Products within the District and adjacent jurisdictions.
- 74. The District is bordered on the northwest, northeast, and southeast by Maryland. The District is bordered on the southwest by the Potomac River which serves as the border between the District and Virginia.
- 75. One of the District's major waterways is the Potomac River. Designated uses for the Potomac River include recreation; the protection and propagation of fish, shellfish, and wildlife; the protection of human health related to the consumption of fish and shellfish; and navigation. 21 DCMR § 1101.2.
- 76. The Potomac River is also the sole source of drinking water for residents of the District. DC Water supplies drinking water, treated by the U.S. Army Corps of Engineers, Washington Aqueduct Division ("WAD") from intakes in the Potomac River (75% of the costs paid by DC Water customers), and distributes the treated water to District consumers and portions of Maryland and Virginia. DC Water conducted raw and finished water testing for PFAS chemicals and identified measurable levels of PFAS.
- 77. The District conducted water testing for PFAS chemicals in the Potomac River near the Ronald Reagan Washington National Airport ("DCA"), and in the Potomac River near its confluence with the Anacostia River. PFOA and/or PFOS were detected at all locations tested.

Of note, the District's testing near DCA showed up to a 600% increase in PFOA from a point directly upstream of DCA to points directly downstream of DCA.

- 78. Testing has also been performed that indicates that PFOS and PFOA have contaminated groundwater in the District and recent testing revealed the presence of PFOS and PFOA in multiple fish species.
- 79. Upon information and belief, the PFOA and PFOS contamination within the District was caused by the release of AFFF at locations within and/or adjacent to the District. On information and belief, AFFF was used and stored in at least two locations within and/or adjacent to the District: DCA and Naval Support Facility (NSF) Anacostia.
- 80. DCA is located in Virginia on the Potomac River, directly adjacent to the District. The airport first opened in 1941. DCA is currently situated on a total of 860 acres, with 733 acres on land and 127 acres underwater.



Aerial view of DCA Airport, sourced from the Library of Congress Prints and Photographs Division Washington, Carol M. Highsmith Archive.

81. On information and belief, AFFF has been used for firefighting and training and stored at DCA since at least the mid-1990s, if not earlier. On information and belief, AFFF used

and stored at DCA contaminated the District's natural resources, including the Potomac River, with PFOA and/or PFOS.

82. NFS Anacostia was a United States Naval Base in Washington, D.C., bounded on the west by the Potomac River, near its confluence with the Anacostia River. In 2010, the base was joined to the Bolling Air Force Base to form the Joint Base Anacostia-Bolling.



Bolling Field and Anacostia Naval Air Station, mid-1940s. Sourced from USAF Reference Series, Maxwell AFB, Alabama: Office of Air Force History: ISBN 0-912799-53-6.

- 83. On information and belief, the Navy began testing seaplanes at NFS Anacostia on or around 1918, and NFS Anacostia remained in service as an active naval air station until 1962 when it was redesignated as a naval support facility. On information and belief, after being redesignated as a naval support facility, NFS Anacostia maintained a large heliport facility that was used by the Marine Helicopter Squadron One to support presidential transport. On information and belief, the heliport facility remained when NFS was incorporated into Joint Base Anacostia-Bolling.
- 84. In 2014, the DOD listed NFS Anacostia as a known Fire/Crash Training Area Site. On information and belief, AFFF was used and stored at NFS Anacostia. On information

and belief, AFFF used and stored at NFS Anacostia contaminated the District's natural resources, including the Potomac River, with PFOA and/or PFOS.

- 85. On information and belief, PFOA and PFOS contamination in the District's waterways has had and will continue to have significant impacts on human health and other natural resources in the District, including biota, fish, and wildlife. Moreover, the PFOA and PFOS contamination has interfered and will continue to significantly interfere with residents' use and enjoyment of the District's natural resources.
- 86. The District has expended significant funds to investigate PFOS and PFOA contamination. The District's investigation is ongoing, and the District may identify additional areas within and adjacent to the District where AFFF was stored and used, and additional areas of contamination within the District as the investigation continues.
- 87. To date, the District has invested considerable monetary and non-monetary resources to investigate and test for PFAS and to develop plans for removal and remediation. The District reasonably anticipates these costs will continue to grow over time.
- 88. PFAS contamination within the District could have been significantly reduced or avoided had Defendants taken action decades ago when they first knew of the environmental and health risks associated with PFAS chemicals.

IV. DC Water Faces Significant Burdens From PFAS Contamination.

- 89. By statute, DC Water is charged with "the general purpose ... to plan, design, construct, operate, maintain, regulate, finance, repair, modernize, and improve water distribution and sewage collection, treatment, and disposal systems and services, and to encourage conservation." D.C. Code § 34-2202.02(c).
- 90. DC Water distributes water and collects and treats wastewater for more than 700,000 residents and 21 million annual visitors to the District. DC Water also provides

wholesale wastewater treatment services for 1.6 million people in Montgomery and Prince George's counties in Maryland and Fairfax and Loudoun counties in Virginia.

- 91. The District has delegated to DC Water the power to, among other things, "establish, adjust, levy, collect, and abate charges for services, facilities, or commodities furnished or supplied by it"; "undertake any public project, acquisition, construction, or any other act necessary to carry out its purposes"; and "maintain, repair, operate, extend, enlarge, investigate, design, construct, and improve the water distribution and sewage collection, treatment, and disposal systems" D.C. Code § 34-2202.03(11), (13)-(14).
- 92. DC Water is funded in substantial part through charges to its users. To the extent costs to provide DC Water's services increase, these costs are proportionately passed along to its ratepayers, including the District itself and its residents.
- 93. DC Water is required to, and has tested for, numerous contaminants within the drinking water it provides, including a number of PFAS substances, among them PFOA and PFOS. 40 C.F.R. § 141.40.
- 94. Sampling and testing have shown the presence of PFAS compounds, including PFOA and PFOS, in the drinking water supplied by DC Water. DC Water has also detected measurable PFAS levels in wastewater and biosolids.
- 95. DC Water has incurred and will continue to incur substantial costs associated with sampling, testing, remediating, and/or treating PFAS contamination in drinking water supplied to its consumers.
- 96. DC Water is responsible for the treatment and management of wastewater and biosolids generated by its consumers. DC Water has expended resources and reasonably

anticipates continuing to expend resources to safely and legally dispose, store, transport, and/or treat wastewater and biosolids contaminated with PFAS.

- 97. There are multiple military installations and airports in the Potomac River Basin that are upstream from drinking water intakes on the Potomac River and that have documented PFAS contamination, including the Eastern West Virginia Regional Airport, Fort Detrick, and the Fort Detrick-Forest Glen Annex.
- 98. On information and belief, the use, spillage, disposal, discharge, or other release of AFFF has caused PFAS contamination within drinking water, wastewater and biosolids managed by DC Water.
- 99. PFAS contamination within the District and in the District's drinking water could have been significantly reduced or avoided had Defendants taken action decades ago when they first knew of the environmental and health risks associated with PFAS chemicals.

V. <u>Defendants' History of Manufacturing and Selling AFFF Products.</u>

- 100. The development of the PFAS class of chemicals began in the 1940s with 3M.

 3M's Central Research Laboratory was working with a scientist at Penn State University, Joseph H. Simons, who had developed and patented a process of preparing fluorine compounds through electrochemical fluorination ("ECF"). Simons assigned his patent to 3M.
- 101. In the 1960s, 3M used its patented ECF process to develop AFFF. 3M's ECF-based AFFF contains both PFOS and PFOA. 3M was the sole supplier of AFFF from the mid-1960s until 1973. 3M continuously manufactured and sold ECF-based AFFF from the mid-1960s through 2001. 3M reached an agreement with the EPA in 2000 to voluntarily stop producing its ECF-based AFFF by 2002.
- 102. In 1973, other Defendant manufacturers began entering the AFFF market. Besides 3M, all other Defendants' AFFF Products were produced using fluorotelomerization ("FT"). FT-

based AFFF contain polyfluorinated compounds that degrade into compounds that include PFOA. From 1973 onward, FT-based AFFF manufacturers were included on the U.S. military qualified products list and could directly compete with 3M.

- 103. FT-based AFFF producers National Foam and Ansul/Tyco entered the AFFF market in the 1970s; Angus/Tyco and Chemguard in the 1990s; Kidde-Fenwal and Buckeye in the 2000s; and Fire Service Plus and Amerex in the 2010s. After 3M left the AFFF market in 2002, FT-based AFFF manufacturers continued to manufacture, market, and promote AFFF.
- 104. Arkema's predecessors and Chemguard's predecessor Ciba began supplying fluorosurfactants used to manufacture AFFF beginning in the 1970s and Dynax supplied fluorosurfactants used to manufacture AFFF beginning in the 1990s. Chemguard continued supplying fluorosurfactants after acquiring Ciba's fluorosurfactants business in 2003. Arkema was created in 2004 and continued supplying fluorosurfactants manufactured by its predecessors in interest.
- 105. In 2002, Old DuPont bought Elf Atochem North America, Inc.'s fluorosurfactants business and supplied fluorosurfactants used to manufacture AFFF. Following Chemours' spin-off from Old DuPont in 2015, Chemours supplied fluorosurfactants used to manufacture AFFF. Old DuPont's decision to enter the fluorosurfactants market in 2002 is particularly interesting. At this point, 3M had already voluntarily left the market after reaching agreement with the EPA. Additionally, as detailed below, Old DuPont made the decision to enter the market having decades of evidence that PFAS were harmful to human health and the environment.
- 106. On information and belief, at various times between 1973 and present, AGC Chemicals, Archroma, Chemicals, Inc., Clariant, Nation Ford, Chem Design, Deepwater Chemicals, Old DuPont, and 3M supplied fluorochemicals that were used to make AFFF.

- 107. On information and belief, AFFF Products manufactured by Defendants other than 3M are fungible. Once the AFFF has been released in the environment, it lacks traits that would make it possible to identify the original manufacturer of the AFFF or its component parts. A contamination site may originate from mixed batches of AFFF coming from different AFFF manufacturers and containing component parts from different fluorosurfactants and fluorochemical manufacturers. For that reason, the District must pursue all Defendants jointly and severally.
- 108. On information and belief, Defendants are also jointly and severally liable because they conspired to conceal the true toxic nature of PFOS and PFOA, in order to profit from the use of AFFF Products and to avoid liability.
- 109. While some Defendants have stopped manufacturing AFFF or transitioned to manufacturing F3, they did not tell customers that they should not use AFFF Products that contain PFOS, PFOA and/or their precursors. Nor did they act to get these products off the market and out of customers' stockpiles. Some research has indicated that AFFF may have a shelf life of up to 25 years. Therefore, AFFF containing PFOS and PFOA may still be included in customers' stockpiles and customers may still be releasing PFOS and PFOA into the environment.

VI. <u>Defendants Knew or Should Have Known That Their AFFF Products Were Harmful to the Environment and Human Health.</u>

- A. 3M and DuPont Knew of the Harms to Human Health and the Environment from PFAS as Early as the 1950s.
- 110. As early as 1948, 3M understood that the stability of the carbon-to-fluorine bonds prevented the fluorinated compounds from undergoing further chemical reactions or degrading under natural processes in the environment. The 1948 patent for the ECF process, which was assigned to 3M, stated that the compounds produced through ECF are non-corrosive, and of little

chemical reactivity, and do not react with any of the metals at ordinary temperatures and react only with the more chemically reactive metals at elevated temperatures.

- 111. The patent application also stated that ECF compounds were thermally stable at temperatures up to 750° C (1382° F) and that the fluorochemicals produced by ECF do not react with other compounds due to the blanket of fluorine atoms surrounding the carbon skeleton of the molecule.
- 112. In 1951, before manufacturing AFFF, 3M began producing PFAS chemicals for Old DuPont for use in its Teflon products. Between this time and the mid-1960s when 3M manufactured and sold AFFF, it had knowledge that PFAS contained in its ECF-produced fluorochemicals could cause significant harm to human health and the environment.
- 113. In 1950, 3M's research had already documented that PFAS accumulate in the blood of mice exposed to the chemicals in laboratory tests. A 1956 study by researchers at Stanford University also found that PFAS bind to proteins in human blood.
- 114. In 1963, 3M issued a technical manual for 3M Brand Fluorochemical Surfactants, where it recognized that certain PFAS chemicals, including PFOS, were toxic. The manual warned that due care should be exercised in handling these materials.
- 115. In 1964, a mere year later, a group of Old DuPont employees working in Teflon manufacturing became sick after their department was moved to a more enclosed workspace. They experienced chills, fever, difficulty breathing, and a tightness in the chest—symptoms referred to variously as "polymer-fume fever," "Teflon flu," or simply, "the shakes." Polymer-fume fever was first reported in the medical literature in 1951. A 1965 study sponsored by Old DuPont found liver damage and increased spleen size in rats fed a PFAS compound over a ninety-day period.

- 116. In addition to these demonstrations of toxicity, additional research and testing performed by 3M indicated that fluorosurfactants were resistant to environmental degradation and would persist essentially unaltered if allowed to enter the environment. One 3M employee wrote in 1964, "This chemical stability also extends itself to all types of biological processes; there are no known biological organisms that are able to attack the carbon-fluorine bond in a fluorocarbon." Thus, 3M knew by the mid-1960s that its fluorosurfactants were immune to chemical and biological degradation in soils and groundwater.
- 117. In short, well before AFFF was introduced into the market in the mid-1960s, 3M and DuPont were aware that PFOS and PFOA presented significant risks to human health and the environment. Despite this knowledge, 3M chose to sell AFFF without warning its customers or regulators.
 - B. <u>Defendants' Evidence of the Harms of PFOA and PFOS Continued Mounting</u>
 After FT-AFFF Manufacturers Entered the Market in the 1970s and 1980s.
- 118. In 1973, just as FT-AFFF manufacturers started entering the market, Old DuPont scientists issued results from a study showing that PFOA caused adverse liver reactions in rats and dogs.
- 119. Two years later, 3M was notified by two independent toxicologists that an unidentified fluorine compound was found in human blood sampled from different blood banks.

 3M was contacted to see if it knew of "possible sources" of the chemicals. 3M's scientists concluded internally that the fluorine compounds resembled PFAS manufactured by 3M, but 3M did not share this conclusion with the independent toxicologists or anyone else outside of 3M.

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H.G. Bryce, *Industrial and Utilitarian Aspects of Fluorine Chemistry*, 310 (1964), available at https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX3022.pdf.

- 120. Although 3M did not inform anyone outside of the company, it did test the blood of its own workers in 1976, finding up to 1,000-times "normal" amounts of organically bound fluorine in their blood. 3M also failed to report these results to the public or to take any steps to remove its PFOA and PFOS products, including AFFF, from the market.
- 121. A year later, Ansul (later acquired by Tyco) authored a report titled "Environmentally Improved AFFF," which acknowledged that releasing AFFF into the environment could pose potential negative impacts to groundwater quality. Ansul wrote: "The purpose of this work is to explore the development of experimental AFFF formulations that would exhibit reduced impact on the environment while retaining certain fire suppression characteristics." Thus, Ansul knew by the mid-1970s that the environmental impact of AFFF needed to be reduced, yet there is no evidence that Ansul/Tyco (or any other manufacturer Defendant) ever pursued initiatives to do so.
- 122. In 1978 through 1979, 3M initiated studies focused on the persistence of PFAS in the environment. One study reported that 3M's PFAS was likely to persist in the environment for an extended period unaltered by metabolic attack. A year later, a 3M study reported that one of 3M's fluorosurfactants was found to be completely resistant to biological test conditions, and that it appeared waterways were the fluorosurfactants' "environmental sink." ¹⁷
- 123. At the same time, 3M sponsored several studies that showed that the fluorosurfactants used in AFFF were even more toxic than previously believed. A study of subacute toxicity in rhesus monkeys, in which the monkeys were to be given doses of PFOS over

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The Ansul Co., *Final Report: Environmentally Improved AFFF*, N00173-76-C-0295 (Dec. 13, 1977), at 1, available at https://apps.dtic.mil/sti/pdfs/ADA050508.pdf.

³M Technical Report Summary from A.N. Welter to R.A. Prokop on Fate of Fluorochemicals, Final Comprehensive Report on FM 3422 (Feb. 7, 1979), available at https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX2563.pdf.

ninety days, had to be redesigned and repeated because of the unexpected early death of all monkeys in all test groups. None of the monkeys survived past twenty days. A summary of the study stated that PFOS proved to be considerably more toxic to monkeys than anticipated. In addition, PFOA was found to reduce the survival rate of fathead minnow fish eggs, and PFOS and PFOA were shown to be toxic to rats. As the study summary observed, the most important question still remained—the long-term effects of these persistent fluorochemicals.

- 124. In 1979, 3M and Old DuPont discussed 3M's discovery of high levels of PFOS in the blood of its workers. Both companies came to the same conclusion: there was "no reason" to notify the EPA of the finding. 3M told the EPA in 1980 only that it had discovered PFOS in the blood of "some of our plant employees."
- 125. Although Defendants did not fully disclose their findings to regulators or the public, they continued to internally study PFAS's impacts on the environment and human health and continued to find troubling results. By the end of the 1980s, 3M and Old DuPont (and possibly other Defendant manufacturers) had knowledge that at least PFOA was associated with elevated incidences of certain cancers; elevated liver enzymes; and birth defects in children born to exposed workers.
- development in fetuses of rats. Based on these results, 3M reassigned women workers so they would not continue to be exposed to fluorochemicals that can cause birth defects. 3M advised Old DuPont of these results in April 1981; later that year, Old DuPont also decided to exclude women from areas where they would be potentially exposed to PFOA and PFOS. By December 1981, Old DuPont had observed and documented birth defects in children born to exposed female workers.

- 127. In 1984, 3M documented a trend of increased PFOS in the blood of 3M workers. The report concluded that this trend must be taken seriously as it possibly showed that the uptake of PFAS from exposure may outpace excretion capabilities of the body. Around that same time, 3M completed a study finding that PFOS caused the growth of cancerous tumors in rats. This finding was shared with Old DuPont in 1988 and led Old DuPont to consider whether the company was required to call PFOA a carcinogen in animals under its current policy.
- 128. On information and belief, the information 3M and Old DuPont gathered on human health risks from PFOA and PFOS was not reported to the public or regulators.
- 129. At this same time, 3M researchers were gathering more evidence of risks to the environment from PFOA and PFOS. In 1983, 3M researchers concluded that PFAS raises concerns about environmental safety, including their persistence, accumulation potential, and toxicity in the environment. For instance, in 1984, Old DuPont secretly tested drinking water near its Teflon plant in Parkersburg, West Virginia, and found the presence of PFOA.
- 130. On information and belief, the information 3M and Old DuPont gathered on environmental risks from PFOA and PFOS was also not reported to the public or regulators.
 - C. <u>As PFOA and PFOS Came Under Regulatory Scrutiny in the 1990s and 2000s,</u> <u>Defendant Manufacturers Continued to Downplay and Conceal the Harms to</u> <u>Human Health and the Environment.</u>
- 131. Federal law requires chemical manufacturers and distributors to immediately notify the EPA if they have information that "reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment." Toxic Substances Control Act ("TSCA") § 8(e), 15 U.S.C. § 2607(e). This reporting requirement has been included in the TSCA since its enactment in 1976. *See* Pub. L. 94-469, Title I, § 8, Oct. 11, 1976, 90 Stat. 2027.

132. Despite decades of research, 3M waited until May 1998 to submit a report to the EPA under TSCA Section 8(e) regarding the potential environmental impacts of PFAS.

However, even in that submission, 3M downplayed what it knew. According to a former 3M employee:

Just before that submission we found PFOS in the blood of eaglets—eaglets still young enough that their only food consisted of fish caught in remote lakes by their parents. This finding indicates a widespread environmental contamination and food chain transfer and probable bioaccumulation and bio-magnification. This is a very significant finding that the 8e reporting rule was created to collect. 3M chose to report simply that PFOS had been found in the blood of animals, which is true but omits the most significant information.¹⁸

- 133. In 2000, after a half-century of manufacturing fluorinated chemicals through ECF, 3M announced that it would phase out its production of several long-chain PFAS compounds, including PFOA and PFOS. Even then, however, 3M downplayed the risks associated with PFOA and PFOS, stating in its press release that its products were safe and that the presence of these materials at low levels do not pose a risk to human health or the environment.
- 134. In April 2006, 3M agreed to pay the EPA a penalty of more than \$1.5 million after being cited for 244 violations of the TSCA, which included violations dating back decades for failing to disclose studies regarding PFOS, PFOA, and other fluorinated compounds.¹⁹
- 135. The late 1990s and early 2000s also brought scrutiny to Old DuPont's use of PFOA. Beginning in 1999, Old DuPont faced lawsuits filed by residents of the Mid-Ohio Valley over contamination from Old DuPont's Washington Works plant near Parkersburg, West Virginia. As part of a settlement of those actions, a panel of scientists was created to examine the

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Letter from R. Purdy to 3M Re: Resignation (Mar. 28, 1999) available at https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1001.pdf.

EPA, 3M Company Settlement (Apr. 25, 2016), available at https://www.epa.gov/enforcement/3m-company-settlement#:~:text=(Washington%2C%20D.C.%20%2D%20April%2025,company%20voluntarily%20 disclosed%20to%20EPA.

health effects of PFOA, called the "C8 Science Panel." Between 2005 and 2013, the C8 Science Panel carried out exposure and health studies in the Mid-Ohio Valley communities. The panel found probable links between PFOA and kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, pregnancy-induced hypertension (including preeclampsia), and hypercholesterolemia.

- 136. In December 2005, the EPA reached a settlement with Old DuPont related to violations of the TSCA for concealing the environmental and health effects of PFOA.²⁰ The settlement included the largest civil administrative penalty the EPA had ever obtained under any environmental statute, \$10.25 million dollars, and further required Old DuPont to perform Supplemental Environmental Projects worth \$6.25 million.
- 137. In 2001, while PFOS was under severe scrutiny, Defendants Tyco, Chemguard, Kidde, National Foam, and Buckeye formed a group called the Fire Fighting Foam Coalition ("FFFC") to protect their business opportunity and advocate for the continued use of FT-based AFFF. Although FT-based AFFF did not contain PFOS, it did contain precursors that degraded into PFOA, which also posed severe risks to the environment and human health.
- 138. Other Defendants have joined FFFC, including Dynax and Fire Service Plus. The FFFC declared that it would serve as a source for accurate, balanced information on environment-related questions and would ensure that accurate information about PFOS alternatives, including telomer-based products, is disseminated in the marketplace.
- 139. The FFFC made several representations regarding the safety of FT-based AFFF that were either misleading half-truths or were contrary to Defendants' internal knowledge. For example, the FFFC assured the public that "telomer based AFFF does not contain PFOS and

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EPA, *E.I DuPont de Nemours and Company PFOA Settlements*, available at https://www.epa.gov/enforcement/ei-dupont-de-nemours-and-company-pfoa-settlements.

cannot be oxidized or metabolized into PFOS."²¹ This statement was at best a half-truth. While telomer-based AFFF does not contain or produce PFOS, it does degrade into PFOA, a chemical that is equally hazardous to the environment and human health.

- 140. The FFFC also told the EPA in 2001 that FT-based AFFF "does not contain any PFOA-based product." Again, this was at best a half-truth, because although telomer-based AFFF does not contain PFOA, members of the FFFC were well aware that it can degrade into PFOA. One company executive admitted in an internal memo that his company's AFFF "will degrade in the environment" to produce PFOA and the "question is how toxic" and how "bioaccumulative" these degraded products are. But contrary to this internal acknowledgment, the FFFC publicly asserted that "telomer based fire fighting foams are not likely to be a source of PFOA in the environment."
- 141. The EPA appointed a committee known as the Telomer Technical Workgroup to make recommendations to the agency. The president of the FFFC represented the FT-based AFFF industry on the EPA committee. When, in 2003, the Telomer Technical Workgroup reported its conclusions and recommendations, the FFFC president was the spokesperson.
- 142. In what the FFFC president called a "major victory" for the industry, the EPA accepted the proposal of its Workgroup that "telomer-based fire fighting foams no longer be considered as part of the PFOA ECA [enforceable consent agreement] process."²⁵ The FFFC president remarked that "[w]hen we started this organization two years ago [in 2001], the fate of

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Id.

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In re Aqueous Film-Forming Foams Prod. Liab. Litig., dkt. 2063-70 (D.S.C. Dec. 22, 2021) (Exhibit AFFF Fire Fighting Foams, EPA Meeting (Sept, 28, 2001)).

²³ *Id.* at dkt. 2409-112 (D.S.C. Jun. 17, 2022) (Exhibit Email from David Spring to John Dowling, Kidde-Fenwal, Inc. RE:EPA Meeting Comments (Apr. 18, 2001)).

²⁴ *Id.* at dkt. 2409-108 (D.S.C. Jun. 17, 2022) (Exhibit Memo from Tom Cortina, FFFC President to Members (Oct. 30, 2003)).

²⁵ *Id.*

telomer based AFFF was being tied directly to the fate of PFOA and the EPA had just told the military to start searching for alternatives to AFFF."²⁶ The FT-based AFFF Defendants had successfully forestalled government restrictions on their products, thereby prolonging the use of AFFF in the United States.

- 143. All Defendants knew, or at the very least should have known, that when used as intended, AFFF Products that contain or break down into PFOS or PFOA would harm the environment and human health.
- 144. Defendants were all sophisticated and knowledgeable in the art and science of designing, formulating, and manufacturing AFFF Products. They understood far more about the properties of their AFFF Products—including the potential hazards they posed to human health and the environment—than the public or the government. Still, Defendants declined to use their sophistication and knowledge to design safer products or to warn the public of the risks of AFFF Products.
- 145. Defendants knew, or at the very least should have known, that their AFFF Products released PFOS, PFOA, and/or their chemical precursors into the environment and that those contaminates would travel through water systems, resist degradation, and bioaccumulate and bio-magnify, resulting in harm to plants, fish, wildlife, and human health.

VII. Old DuPont Spun Off Chemours With Its PFAS Liabilities and Moved Substantial Assets to New DuPont and Corteva In Order to Shield Those Assets from PFAS Creditors Like the District.

146. On information and belief, Old DuPont engaged in a complicated three-step restructuring of its business for the purpose of shielding assets from its creditors, such as the

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²⁶ *Id*.

District, with claims related to PFAS contamination from Old DuPont's fluorochemical and fluoroproducts.

147. On information and belief, at the time of this restructuring, Old DuPont knew that its liabilities, including clean-up costs, remediation obligations, and damages, arising from its misconduct were likely in the billions of dollars.

A. Step 1: Chemours Spin-off.

- 148. On information and belief, in 2013, Old DuPont's management began to consider restructuring the company in order to cast off significant environmental and tort liabilities from its Performance Chemicals Unit ("Performance Chemicals") while extracting a multibillion-dollar dividend from the new company. Performance Chemicals manufactured and sold industrial and specialty chemicals including a range of fluorochemicals and fluoroproducts that contained PFAS, including PFOA and/or PFOS and their precursors.
- 149. Old DuPont announced a proposed spin-off in 2013 and determined that the spin-off company would pay Old DuPont \$4 billion upon divestment, which would require the spin-off company to take on billions in debt.
- 150. On information and belief, Chemours was thereafter formed in February 2014 as a wholly-owned subsidiary of Old DuPont, and remained so until July 1, 2015, when Old DuPont completed the spin-off, along with the transfer of vast environmental liabilities, including those related to PFAS.
- 151. Through their effectuation of the spin-off in July 2015, Chemours and Old DuPont caused Chemours to transfer valuable assets to Old DuPont, including but not limited to a \$3.9 billion dividend, while simultaneously having Chemours assume significant liabilities, including all liabilities related to PFAS.

- 152. On information and belief, the spin-off of Performance Chemicals was not bargained at arm's-length.
- 153. At the time the spin-off occurred, Chemours had a separate board; however, the board was controlled by Old DuPont employees.
- 154. On information and belief, prior to the spin-off, Old DuPont caused Chemours to assume \$4 billion in debt to pay the promised dividend to Old DuPont stockholders when the spin-off was complete.
- 155. On information and belief, Old DuPont transferred to Chemours a disproportionately small allocation of assets to cover debts and liabilities. On information and belief, Old DuPont transferred less than 20% of its business line, but over 66% of its environmental liabilities and 90% of Old DuPont's pending litigation by volume of cases. These liabilities were taken on by Chemours in addition to the \$3.9 billion in debt it assumed to pay a dividend to Old DuPont's shareholders.
- 156. On information and belief, in its valuation, Old DuPont purposefully significantly undervalued the potential maximum liability from the PFAS liabilities it transferred to Chemours.
- 157. At the time of the spin-off, Old DuPont had been sued, threatened with suit, and/or had knowledge of the likelihood of litigation to be filed regarding Old DuPont's liabilities for damages and injuries from the manufacture, sale, and/or disposal of PFAS-containing products. For example:
 - A. In 2005, Old DuPont agreed to pay \$16.5 million in civil penalties to the EPA to resolve alleged violations of the TCSA for concealing information regarding the harms of PFOA.

- B. Also in 2005, Old DuPont agreed to pay \$343 million to settle the class action lawsuit filed on behalf of 70,000 residents of the Ohio River Valley relating to the contamination of the watershed with PFOA. This settlement also created the C8 Science Panel, which, as discussed above, conducted studies on the health effects of PFOA exposure between 2005 and 2013.
- C. In 2015, at the time of the spin-off, another MDL involving over 3,500 PFOA-related personal injury claims brought by citizens of Ohio and West Virginia was pending in Ohio.
- 158. On information and belief, the assets Old DuPont transferred to Chemours were unreasonably small in relation to the liabilities Chemours assumed. As a result, Chemours did not receive a reasonably equivalent value in exchange for the transfer of debts and obligations from Old DuPont.
- 159. On information and belief, Old DuPont tried to conceal the details of the spin-off with Chemours by requiring that all disputes go through confidential arbitration under terms that favored Old DuPont.
- 160. Old DuPont knew or reasonably should have known that Chemours would incur debts beyond its ability to pay as they became due. Through the spin-off Old DuPont and Chemours limited the availability of assets to cover all of the liability for damages and injuries arising from Old DuPont's manufacture and sale of PFAS-containing products.

B. Step 2-Old DuPont/Dow Merger.

161. After the Chemours spin-off, Old DuPont asserted that it was no longer responsible for the widespread PFAS contamination. While Old DuPont publicly claimed that the PFAS liabilities now rested solely with Chemours, on information and belief, Old DuPont knew that it could still face exposure.

- On December 11, 2015, less than six months following the Chemours spin-off, Old DuPont and Old Dow announced that their respective boards of directors had approved a merger and that the combined company would be named DowDuPont, Inc. ("Dow-DuPont Merger"). The companies disclosed that they intended to subsequently separate the combined companies' businesses into three publicly traded companies through further spin-offs.
- 163. Old DuPont and Old Dow entered into a merger agreement that provided for: (a) the formation of a new holding company, Diamond-Orion HoldCo, Inc., later named DowDuPont; and (b) the creation of two new merger subsidiaries into which Old Dow and Old DuPont each would merge.
- 164. Thus, as a result of the Dow-DuPont Merger, and in accordance with the merger agreement, Old Dow and Old DuPont each became wholly-owned subsidiaries of DowDuPont. Upon information and belief, this arrangement was created to separate Old Dow from Old DuPont's historical Performance Chemical liabilities.
 - C. <u>Step-3: Transfer of Assets From Old DuPont and Separation of Corteva and New DuPont.</u>
- 165. On information and belief, after the merger, DowDuPont underwent a significant internal reorganization, with the net effect of these transactions being the transfer of a substantial portion of Old DuPont's assets out of Old DuPont. On information and belief, the details of the transactions are purposefully being hidden from the public. On information and belief, Old DuPont transferred a substantial portion of its valuable assets to DowDuPont for less than the assets were worth. On information and belief, the transactions were intended to frustrate and hinder creditors with claims against Old DuPont, including with respect to its substantial PFAS liabilities.

- 166. On information and belief, the significant internal reorganization was in preparation for DowDuPont and its subsidiaries to be split into three, separate, publicly traded companies. On information and belief, Old DuPont's assets, including its remaining business segments and product lines, were transferred either directly or indirectly to DowDuPont, which reshuffled the assets and combined them with the assets of Old Dow and reorganized the assets into three divisions: the Agriculture Business, the Specialty Products Business, and the Material Sciences Business.
- 167. In 2019, DowDuPont incorporated two new companies, Corteva and Dow, Inc. ("New Dow"), and spun-off Corteva and New Dow into separate, publicly traded companies. Generally, assets related to the Agriculture Business division were allocated to Corteva; assets related to the Material Science Business were allocated to New Dow; and the assets related to the Specialty Products Business remained with DowDuPont, which then became New DuPont. Each entity generally retained and assumed the liabilities related to the divisions they retained.
 - 168. During this process Old DuPont became a wholly-owned subsidiary of Corteva.
- 169. On information and belief, Corteva and New DuPont also assumed financial responsibility, on a pro rata basis, for Old DuPont's liabilities not related to the Agriculture Business, Material Science Business, or the Specialty Products Business. On information and belief, the pro rata allocation between Corteva and New DuPont of Old DuPont's historical liabilities includes any liability Old DuPont may have retained for PFAS contamination from Performance Chemicals' fluorochemicals and fluoroproducts, including the District's claims here.
- 170. On information and belief, during these transactions, a large amount of Old DuPont's assets were transferred to Corteva and New DuPont for far less than their value. On

information and belief, at the end of these transactions, Old DuPont had far fewer tangible assets than it had prior to the restructuring. On information and belief, through this restructuring process, Old DuPont divested approximately half of its tangible assets, totaling roughly \$20 billion.

171. The net result of the three-step restructuring Old DuPont undertook was to move its extensive PFAS liabilities to an underfunded company, Chemours, and to further shield its extensive assets by transferring them to Corteva and New DuPont for far less than their value.

FIRST CAUSE OF ACTION (AGAINST ALL DEFENDANTS) Public Nuisance

- 172. The District incorporates by reference the foregoing allegations.
- 173. The District has a public interest in its natural resources, including surface water and ground water, wildlife, fish, shellfish, and biota. DC Water and the District have a public interest in the drinking water DC Water distributes to its customers, which include the District and the District's residents. The protection of these resources from environmental contamination, and ensuring the well-being of the environment and economy and the free use of its environmental resources by District citizens, are essential public functions and are public rights to be vindicated by the Attorney General.
- 174. Defendants intentionally manufactured, marketed, distributed, and sold their AFFF Products in a manner that created or contributed to the creation of a public nuisance that is harmful to health and obstructs the free use and enjoyment of the District's natural resources.
- 175. Defendants knew or should have known that PFOA and PFOS were toxic to human health and the environment and that when AFFF is used as intended it directly introduces those toxic chemicals into the environment.

- 176. Defendants knew or should have known that their AFFF Products, as ordinarily used, were likely to end up contaminating surface water, within the District and upstream, and the District's groundwater, drinking water, soil, sediments, biota, fish, wildlife and other natural resources.
- 177. Defendants' conduct and the release of their PFAS contaminants into the District annoy, injure, and endanger the comfort, repose, health, and safety of others.
- 178. An ordinary person would be reasonably annoyed or disturbed by the presence of toxic PFAS that endangers the health of fish, animals, and humans and degrades water quality as well as soils and sediments.
- 179. Defendants' conduct and the presence of PFAS contamination from their AFFF Products in the District interfere with and obstruct the public's free use and comfortable enjoyment of the District's natural resources for commerce, navigation, fishing, recreation, and aesthetic enjoyment.
- 180. PFAS interfere with the free use of the District's waters for a healthy and ecologically sound environment.
- 181. The seriousness of the environmental risks and human health risks posed by PFAS far outweigh any social utility of Defendants' conduct.
- 182. The rights, interests, and inconvenience to the District and general public far outweigh the rights, interests, and inconvenience to Defendants.
- 183. The District is incurring and will continue to incur significant costs to investigate, monitor, analyze, and remediate PFAS contamination.
- 184. The District will incur future costs to remove PFAS and to store, destroy, or otherwise safely dispose of PFAS.

- 185. DC Water has incurred and will continue to incur costs associated with sampling, testing, treating, and/or disposing of PFAS that will, in turn, be passed on to its ratepayers, including both the District and its residents.
- 186. As a result of the Defendants' conduct, the District suffers injuries to the public interest and to the health and well-being of its environment.
- 187. Defendants knew or, in the exercise of reasonable care, should have known that the manufacture, sale, use, and/or disposal of their AFFF Products would cause contamination of the environment, including the District's natural resources and drinking water distributed by DC Water.
- 188. Defendants had a duty to conduct their businesses, including the manufacture, distribution, sale, and promotion of AFFF Products, without directly misrepresenting or concealing the dangers of PFAS and in a manner that did not interfere with the District's and its residents' use and enjoyment of their natural resources, including their waterways.
- 189. Defendants are under a continuing duty to act to correct and remediate the injuries their conduct has caused, and to warn the District, its residents, and DC Water about the human health and environmental risks posed by their AFFF Products. Each day on which they fail to do so constitutes a new injury to the District, its residents, and DC Water.
- 190. As a direct and proximate result of Defendants' creation of a public nuisance, the District has suffered, and continues to suffer, monetary damages, including loss of value and loss of use of the District's natural resources and water systems, and costs incurred by and to be incurred in the future by DC Water and its ratepayers for sampling, testing, treatment, and/or disposal of PFAS contaminated drinking water, wastewater, and biosolids.

191. Additionally, an award of punitive damages is appropriate because Defendants' conduct was accompanied by a state of mind evincing malice, fraud, ill will, recklessness, wantonness, oppressiveness, willful disregard of the public's right to enjoy an environment free of toxic contamination, or equivalent circumstances.

SECOND CAUSE OF ACTION (AGAINST ALL DEFENDANTS) Strict Product Liability - Design Defect

- 192. The District incorporates by reference the foregoing allegations.
- 193. AFFF Products were not reasonably safe as designed at the time they left Defendants' control.
- 194. AFFF Products are unsafe as designed and are unreasonably dangerous to human health and the environment.
- 195. Defendants knew or should have known their AFFF Products were not safe and that when their AFFF Products were used as designed, the Products were likely to contaminate the environment and pose a threat to human health.
- 196. Defendants knew or should have known that PFOS and PFOA are highly soluble in water, highly mobile, extremely persistent in the environment, and highly likely to become a persistent pollutant if released into the environment.
- 197. Defendants manufactured, distributed, marketed, promoted, and sold AFFF Products in order to maximize their profits despite the foreseeable and known harms.
- 198. Practical and feasible alternative designs capable of reducing the District's injuries were commercially feasible.
- 199. The magnitude of the danger from the release of PFAS into the environment from the use of Defendants' AFFF Products is significant.

- 200. The magnitude of the dangers from Defendants' AFFF Products outweighs the costs of avoiding the danger.
- 201. An ordinary consumer would conclude that the Defendants ought to have used alternative designs for the AFFF Products.
- 202. Alternative designs to AFFF were readily available to Defendants, including but not limited to C-6 AFFF and F3.
- 203. Defendants knew or should have known that their AFFF Products were unsafe to an extent beyond that which would be contemplated by an ordinary person because of the information and evidence uniquely available to them.
- 204. AFFF Products were placed in the stream of commerce by Defendants in a defective and unreasonably dangerous condition.
- 205. It was foreseeable to Defendants that PFAS would reach and persist in the District's waterways and other natural resources, causing harm to the environment and human health from the use of their AFFF Products as intended.
- 206. It was foreseeable to Defendants that the use of their AFFF Products as intended would cause PFAS to reach and persist in the District's waterways and contaminate the drinking water distributed by DC Water, causing harm to human health and imposing costs on DC Water to sample, test, investigate, treat, and/or dispose of PFAS. It was similarly foreseeable to Defendants that the use of their AFFF Products as intended would impose costs on DC Water to address the presence of PFAS in wastewater and biosolids managed by DC Water.
- 207. Defendants are strictly liable for all damages arising out of their defectively designed AFFF Products.

- 208. Defendants' defective design of their AFFF Products caused PFAS to reach the District's waterways and other natural resources and caused continuing injury to the public interest.
- 209. Defendants' defective design of their AFFF Products caused PFAS to contaminate drinking water distributed by DC Water and caused continuing injury to DC Water and its consumers, including the District and its residents.
- 210. The District has suffered and continues to suffer damages in amounts to be proven at trial.

THIRD CAUSE OF ACTION (AGAINST ALL DEFENDANTS) Strict Product Liability – Failure to Warn

- 211. The District incorporates by reference the foregoing allegations.
- 212. Defendants knew or should have known their AFFF Products were not safe and that when their AFFF Products were used as designed, the Products were likely to contaminate the environment and pose a threat to human health.
- 213. Defendants knew or should have known that PFAS are highly soluble in water, highly mobile, extremely persistent in the environment, and highly likely to become a persistent pollutant if released into the environment.
- 214. The introduction of PFAS into the environment from the ordinary use of Defendants' AFFF Products poses a risk of significant harm to the environment and human health.
- 215. The risks posed from the ordinary use of Defendants' AFFF Products are sufficiently serious to require a warning.

- 216. Defendants had unique information and evidence available to them that was not available to consumers or the public-at-large regarding the harms that their AFFF Products posed.
- 217. Defendants knew or should have known that their AFFF Products were unsafe to an extent beyond that which would be contemplated by an ordinary person because of the information and evidence uniquely available to them.
- 218. AFFF Products were placed in the stream of commerce by Defendants without a sufficient warning of the harms posed to the environment and human health from the ordinary use of their products.
- 219. It was foreseeable to Defendants that the use of their AFFF Products as intended would cause PFAS to reach and persist in the District's waterways and contaminate the drinking water distributed by DC Water, causing harm to human health and imposing costs on DC Water to sample, test, investigate, treat, and/or dispose of PFAS. It was similarly foreseeable to Defendants that the use of their AFFF Products as intended would impose costs on DC Water to address the presence of PFAS in wastewater and biosolids managed by DC Water.
- 220. Defendants are strictly liable for all damages arising out of their failure to warn of the dangers associated with the use of their AFFF Products.
- 221. Defendants' failure to warn of the dangers associated with the ordinary use of their AFFF Products caused PFAS to reach the District's waterways and other natural resources and caused continuing injury to the public interest.
- 222. Defendants' failure to warn of the dangers associated with the ordinary use of their AFFF Products caused PFAS to contaminate drinking water distributed by DC Water and caused continuing injury to DC Water and its consumers, including the District and its residents.

223. The District has suffered and continues to suffer damages in amounts to be proven at trial.

FOURTH CAUSE OF ACTION (AGAINST ALL DEFENDANTS) Negligence

- 224. The District incorporates by reference the foregoing allegations.
- 225. As manufacturers of AFFF Products containing PFAS, Defendants owed a duty to the District and to all persons whom its products might foreseeably harm to exercise due care in the formulation, manufacture, sale, labeling, warning, and use of AFFF Products.
- 226. Defendants owed a duty to the District to act reasonably and not place inherently dangerous AFFF Products into the marketplace knowing that the release of PFAS into the air, soil, and water was imminent and certain.
- 227. Defendants knew or should have known that PFAS were leaching into surface and ground water from AFFF Products used for firefighting training, emergency response activities, and federally mandated testing of firefighting equipment.
- 228. Defendants knew or should have known that PFAS are highly soluble in water, highly mobile, extremely persistent in the environment, and highly likely to become a persistent pollutant if released into the environment.
- 229. Defendants knew or should have known that the manner in which they were designing, manufacturing, marketing, distributing, and selling their AFFF Products would result in contamination of the District's natural resources with PFAS.
- 230. Defendants knew or should have known that the manner in which they were designing, manufacturing, marketing, distributing, and selling their AFFF Products would result in contamination of drinking water distributed by DC Water, causing harm to human health and injury to DC Water and its consumers, including the District and its residents. Defendants

similarly knew or should have known that the manner in which they were designing, and manufacturing, marketing, distributing, and selling their AFFF Products would impose costs on DC Water to address the presence of PFAS in wastewater and biosolids managed by DC Water.

- 231. Despite the fact that Defendants knew or should have known that PFAS are toxic, can contaminate the environment, and cause injury to human health, Defendants negligently:
 - A. Designed, manufactured, formulated, handled, labeled, controlled, marketed, promoted, and/or sold AFFF Products containing PFOS, PFOA, and/or their chemical precursors;
 - B. Issued deficient instructions on how their AFFF Products should be used and disposed of, thereby permitting PFOA and PFOS to contaminate the surface water, within the District and upstream, and the District's groundwater and other natural resources;
 - C. Failed to recall and/or warn the users of their AFFF Products of the dangers of groundwater, surface water, and other media contamination as a result of ordinary use and disposal of their AFFF Products;
 - D. Failed and refused to issue the appropriate warning and/or recalls to the users of their AFFF Products; and
 - E. Continue to fail to take reasonable, adequate, and sufficient steps or actions to eliminate, correct, or remedy the contamination that has occurred.
- 232. The magnitude of the burden on the Defendants to guard against this foreseeable harm to the District was minimal.

- 233. As manufacturers, Defendants were in the best position to provide adequate instructions, proper labeling, and sufficient warnings about their AFFF Products, and to take steps to eliminate, correct, or remedy any contamination they caused.
- 234. As a direct and proximate result of Defendants' negligence, the District has suffered and will continue to suffer damage to its natural resources from PFOA and PFOS contamination, requiring investigation, remediation, and monitoring costs, and DC Water and its ratepayers have suffered and will continue to suffer damage for sampling, testing, treatment, and/or disposal of PFAS.
- 235. Defendants knew that it was substantially certain that their acts and omissions described above would result in damage to the District's property from PFOA and PFOS contamination. Defendants committed each of the above-described acts and omissions knowingly, willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless disregard for the District's property and the health and safety of the District's residents and DC Water's consumers.
- 236. The District suffered and continues to suffer damages in amounts to be proven at trial.

FIFTH CAUSE OF ACTION (AGAINST DEFENDANTS OLD DUPONT AND CHEMOURS) Actual Fraudulent Transfer, D.C. Code § 28-3104(a)(1)

- 237. The District incorporates by reference the foregoing allegations.
- 238. Under the District's enactment of the Uniform Fraudulent Transfers Act ("UFTA"), a transaction made by a debtor "[w]ith actual intent to hinder, delay, or defraud any creditor of the debtor" is fraudulent as to a creditor. D.C. Code § 28-3104(a)(1). In determining actual intent, consideration may be given to several factors, including, whether: (1) "[t]he

transfer or obligation was to an insider"; (2) "[t]he transfer or obligation was disclosed or concealed"; (3) "[b]efore the transfer was made or obligation was incurred, the debtor had been sued or threatened with suit"; (4) "[t]he transfer occurred shortly before or shortly after a substantial debt was incurred"; and (5) "[t]he value of the consideration received by the debtor was reasonably equivalent to the value of the asset transferred or the amount of the obligation incurred." D.C. Code § 28-3104(b).

- 239. Under UFTA, a "[c]reditor" is "a person who has a claim." D.C. Code § 28-3101(4). A "[c]laim" is "a right to payment, whether or not the right is reduced to judgment, liquidated, unliquidated, fixed, contingent, matured, unmatured, disputed, undisputed, legal, equitable, secured, or unsecured." *Id.* § 28-3101(3).
- 240. Where a transfer is found to have been fraudulent, a creditor may bring an action to: (1) avoid the transfer as to the creditor's claim; (2) to attach the creditor's claim against assets transferred or other property of the transferee; (3) after obtaining judgment on a claim against the debtor, and if the court orders, levy execution on the asset transferred or its proceeds. D.C. Code § 28-3107.
- 241. At all relevant times, the District is and was a creditor of Old DuPont. After the 2015 spin-off, the District became a creditor of Chemours.
- 242. Old DuPont created its subsidiary Chemours in 2014 and transferred Performance Chemicals to Chemours in 2015 with the intent to hinder, delay, or defraud creditors that held claims related to environmental and human health damages from Old DuPont's fluorochemical products including fluorosurfactants.
- 243. At the time this transaction was made, Old DuPont was in a position to, and in fact did, control and dominate Chemours.

- 244. The spin-off resulted in Chemours transferring significant assets to Old DuPont, including \$4 billion that Chemours took on in debt, to pay a dividend to Old DuPont's stockholders.
- 245. Old DuPont transferred to Chemours a disproportionately small allocation of assets that Old DuPont knew or should have known were insufficient to pay the extensive environmental liabilities transferred to Chemours.
- 246. Old DuPont and Chemours took actions to try to conceal facts regarding the 2015 spin-off including requiring confidential mediation of all disputes related to the transaction, under terms that favored Old DuPont.
- 247. At the time of the 2015 spin-off, Old DuPont had been sued, threatened with suit, and/or had knowledge of the likelihood of future litigation regarding Old DuPont's liabilities for PFAS contamination, such as those of the District.
- 248. At the time of the Chemours spin-off, Chemours assumed liabilities from Old DuPont, and Old DuPont and Chemours intended and expected Chemours to incur debts beyond its ability to pay as they became due, or should reasonably have expected that Chemours would incur debts beyond its ability to pay as they became due.
- 249. On information and belief, Corteva and New DuPont assumed liability that Old DuPont may have retained, as described above.
- 250. The District has been harmed by this transaction, which was designed to shield assets from creditors, such as the District, that have been damaged by Old DuPont's conduct.
- 251. Under UFTA, the District is entitled to void these transactions and to recover property or value transferred from Old DuPont to Corteva and New DuPont. D.C. Code § 28-3107(a).

SIXTH CAUSE OF ACTION (AGAINST DEFENDANTS OLD DUPONT AND CHEMOURS)

Constructive Fraudulent Transfer, D.C. Code § 28-3104(a)(2)

- 252. The District incorporates by reference the foregoing allegations.
- 253. Under UFTA's constructive fraudulent transfer provision, a transaction made by a debtor is fraudulent as to a creditor if the debtor made the transfer:

[W]ithout receiving a reasonably equivalent value in exchange for the transfer or obligation, and the debtor...[w]as engaged or was about to engage in a business or a transaction for which the remaining assets of the debtor were unreasonably small in relation to the business or transaction; or...[i]ntended to incur, or believed or reasonably should have believed that the debtor would incur, debts beyond the debtor's ability to pay as they became due.

D.C. Code § 28-3104(a)(2).

- 254. At all relevant times, the District is and was a creditor of Old DuPont. After the 2015 spin-off, the District became a creditor of Chemours.
- 255. Chemours did not receive reasonably equivalent value from Old DuPont in exchange for the assets and liabilities it assumed in the Chemours spin-off.
- 256. The exchange of assets and liabilities in the Chemours spin-off was made to benefit, or for the benefit of, Old DuPont.
- 257. At the time this transaction was made, Old DuPont was in a position to, and in fact did, control and dominate Chemours.
- 258. Chemours engaged in these transactions when it was engaged or about to be engaged in a business for which its remaining assets were unreasonably small in relation to its business.
- 259. At the time of the Chemours spin-off, Chemours assumed liabilities from Old DuPont, and Old DuPont and Chemours intended and expected Chemours to incur debts beyond

its ability to pay as they became due, or should reasonably have expected that Chemours would incur debts beyond its ability to pay as they became due.

- 260. On information and belief, Corteva and New DuPont assumed liability that Old DuPont may have retained, as described above.
- 261. The District has been harmed as a result of this transaction, which was designed to shield assets from creditors such as the District that have been damaged by Old DuPont's conduct.
- 262. Under UFTA, the District is entitled to void these transactions and to recover property or value transferred from Chemours to Old DuPont. D.C. Code § 28-3107(a).

SEVENTH CAUSE OF ACTION (AGAINST DEFENDANTS OLD DUPONT, NEW DUPONT, AND CORTEVA) Actual Fraudulent Transfer, D.C. Code § 28-3104(a)(1)

- 263. The District incorporates by reference the foregoing allegations.
- 264. At all relevant times, the District is and was a creditor of Old DuPont.
- 265. Through its participation in the Dow-DuPont Merger, and in the creation and separation of New DuPont, New Dow, and Corteva, Old DuPont sold or transferred, directly or indirectly, valuable assets and business lines to Corteva and New DuPont.
- 266. Old DuPont, New DuPont, and Corteva acted with the actual intent to hinder, delay, and defraud current and future creditors of Old DuPont, including the District.
- 267. The sales and transfers were made for the benefit of New DuPont and/or Corteva and to the detriment of Old DuPont and its creditors.
- 268. At the time the sales and transfers were made, New DuPont was in a position to, and in fact did, control and dominate Corteva and Old DuPont.
- 269. The transactions resulted in Old DuPont transferring significant assets to New DuPont and Corteva, totaling roughly \$20 billion dollars.

- 270. After the transactions, Old DuPont was left with assets that New DuPont, Corteva, and Old DuPont knew were insufficient to pay its extensive environmental liabilities, including the District's claims.
- 271. At the time of these transactions, Old DuPont, New DuPont, and Corteva had knowledge of the likelihood of litigation to be filed regarding Old DuPont's liabilities for PFAS contamination, such as those of the District.
- 272. At the time of these transactions, Old DuPont, New DuPont, and Corteva intended and expected Old DuPont to incur debts beyond its ability to pay as they became due, or should reasonably have expected that Old DuPont would incur debts beyond its ability to pay as they became due.
- 273. The District has been harmed as a result of these transaction, which are designed to shield assets from creditors, such as the District, that have been damaged by Old DuPont's conduct.
- 274. Under UFTA, the District is entitled to void these transactions and to recover property or value transferred from Old DuPont to New DuPont and Corteva. D.C. Code § 28-3107(a).

EIGHTH CAUSE OF ACTION (AGAINST DEFENDANTS OLD DUPONT, NEW DUPONT, AND CORTEVA) Constructive Fraudulent Transfer, D.C. Code § 28-3104(a)(1)

- 275. The District incorporates by reference the foregoing allegations.
- 276. At all relevant times, the District is and was a creditor of Old DuPont.
- 277. Old DuPont did not receive reasonably equivalent value from New DuPont and Corteva in exchange for the valuable assets transferred from Old DuPont.

- 278. These sales and transfers were made to benefit, or for the benefit of, New DuPont and/or Corteva.
- 279. At the time the sales and transfers were made, New DuPont was in a position to, and in fact did, control and dominate Old DuPont and Corteva.
- 280. Old DuPont transferred assets to New DuPont and Corteva when it was engaged or about to be engaged in a business for which its remaining assets were unreasonably small in relation to its business.
- 281. At the time of these transactions, Old DuPont, New DuPont, and Corteva believed or reasonably should have believed that Old DuPont would incur debts beyond its ability to pay as they became due.
- 282. The District has been harmed as a result of these transactions, which are designed to shield assets from creditors, such as the District, that have been damaged by Old DuPont's conduct.
- 283. Under UFTA, the District is entitled to void these transactions and to recover property or value transferred from Old DuPont to New DuPont and Corteva. D.C. Code § 28-3107(a).

PRAYER FOR RELIEF

The District prays for judgment against Defendants as follows:

- A. Damages for injury to the District's natural resources, including the economic impact to the District and its residents from loss of ecological services or other injuries resulting from the conduct alleged herein;
- B. An award of past, present, and future costs to investigate, assess, analyze, monitor, and remediate the contamination of the District's natural resources;

- C. An award of past, present, and future costs borne by DC Water or its ratepayers for sampling, testing, investigation, treatment, remediation, and/or disposal of PFAS;
- D. Any other damages, including punitive or exemplary damages, as permitted by law:
- E. A judicial determination that the Defendants are liable for future costs related to the investigation, remediation and removal of PFAS in and around the District, including drinking water, wastewater, and biosolids managed by DC Water;
 - F. Litigation costs and attorneys' fees, as permitted by law;
- G. Pre-judgment and post-judgment interest on all monies awarded, as permitted by law:
- H. Avoidance of the transfers of assets from Chemours to Old DuPont and recovery of property and value transferred to Old DuPont;
- I. Avoidance of the transfers of assets from Old DuPont to New DuPont and recovery of property and value transferred to New DuPont;
- J. Avoidance of the transfers of assets from Old DuPont to Corteva and recovery of property and value transferred to Corteva;
- K. Imposition of a constructive trust over the proceeds of the transfers between Old
 DuPont and Chemours for the benefit of the District;
- L. Imposition of a constructive trust over the proceeds of the transfers between Old DuPont and New DuPont for the benefit of the District;
- M. Imposition of a constructive trust over the proceeds of the transfers between Old DuPont and Corteva for the benefit of the District; and
 - N. Such other and further relief as the Court deems just and proper.

JURY DEMAND

The District respectfully requests trial by jury on all claims so triable.

Respectfully submitted,

Date: July 17, 2023 BRIAN L. SCHWALB

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*Pro Hac Vice Forthcoming

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