PFAS:
Liability and Coverage for the "Forever Chemicals"

BATESCAREY LLP

May 11, 2022

Adam H. Fleischer

R. Patrick Bedell

I. Jordan Lowe

BatesCarey LLP
191 N. Wacker Dr., Suite 2400
Chicago, IL 60606

TABLE OF CONTENTS

EXECUTIVE SUMMARY

For decades, BatesCarey has litigated insurance coverage disputes involving nationwide environmental pollution claims arising from an ever-evolving recognition of the toxicity of everyday products once thought to be innocuous, or even beneficial to society. Now, a new and imposing wave of such claims is here- related to a harmful product that will simply never go away.

New regulations are being implemented to monitor, control and remediate products and natural resources contaminated with perfluoroalkyl and polyfluoroalkyl substances ("PFAS"). Along with new regulations has come a flood of lawsuits, and insurance coverage challenges, that have already seen settlements rising into the billions of dollars. And this is just the start.

PFAS are man-made chemicals that have been used in numerous industrial and consumer products since the 1940s such as firefighting foam, water-resistant clothing, nonstick cookware, stainproof carpeting, and cleaning products. Over the past decade, PFAS has been an increasing focus of state and federal regulators as developing medical science has noted a potential link between PFAS exposure and adverse health effects, including cancer, liver damage, decreased fertility, asthma, and thyroid disease.

As litigation and regulation of PFAS increases, insurers should be aware of the potential exposure that chemical manufacturers and commercial users may face, as well as common issues pertaining to insurance coverage for PFAS-related claims. The foremost coverage issue impacting PFAS exposures is the application of the pollution exclusion in its various iterations that have been issued over the last fifty-years. In early 2022, BatesCarey attorneys secured a "no duty to defend" ruling in a $23.5 million PFAS case under both the "qualified" and "absolute" pollution exclusions. However, other courts to consider the pollution exclusion in the context of PFAS-related claims have declined to give the exclusion its full effect. We summarize these issues in greater detail below.

I. WHAT ARE PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES (PFAS)?

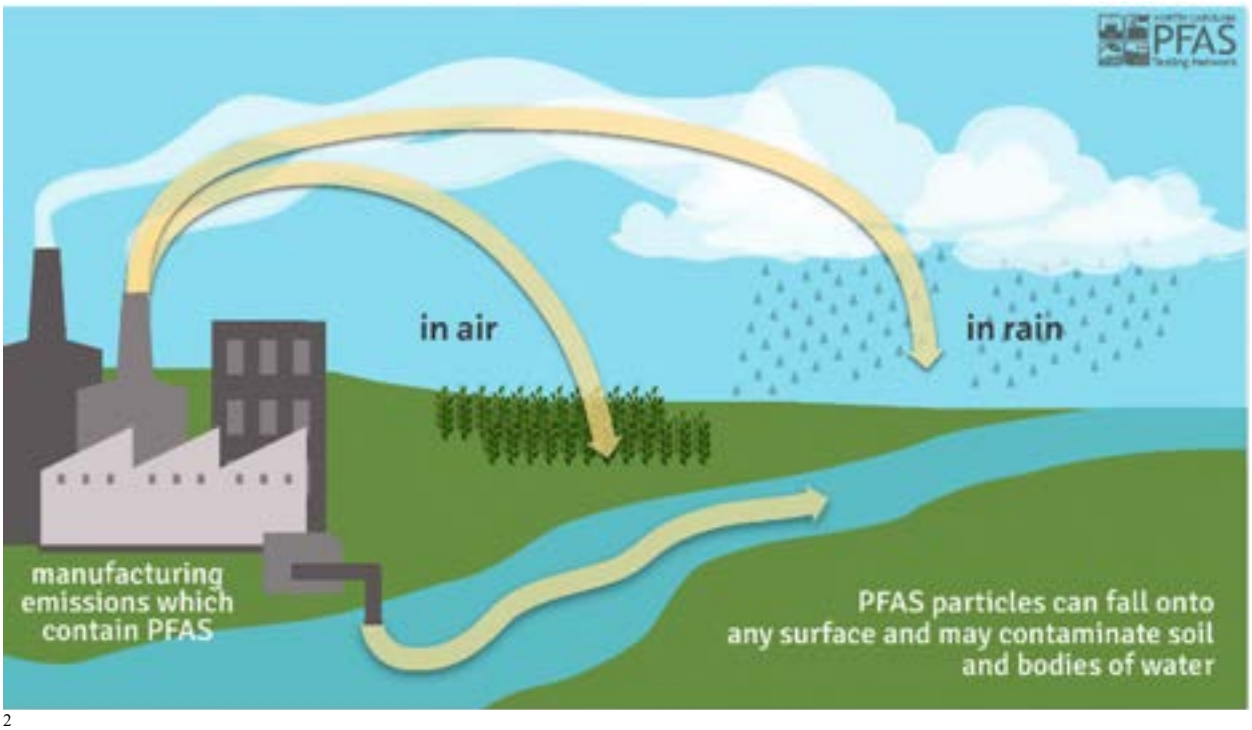
A. PFAS Are "Forever Chemicals"

PFAS are a family of man-made chemical compounds, including thousands of chemicals, containing fluorine and carbon atoms. These chemicals are often found in soil and water near sites where they are manufactured, used or discarded.

PFAS include chemicals such as perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), GenX and more than 7,800 others. PFOA and PFOS are allegedly the most toxic chemicals in the PFAS family and have even been shown to be toxic at very low concentrations. Exposure to PFAS in both humans and animals has allegedly been linked to several diseases, including cancer, liver damage, and decreased fertility.[1] Due to their water-resistant qualities, once PFAS are released onto land or in the air or water, those compounds allegedly migrate through the

[1] Agency for Toxic Substances and Disease Registry, *Per- and Polyfluoroalkyl Substances (PFAS) and Your Health,* available at: https://www.atsdr.cdc.gov/pfas/health-effects/overview.html

environment and resist natural degradation and are difficult and costly to remove. The chemical chains of PFAS can travel long distances, move through the soil, seep into groundwater, or be carried through the air, making them especially difficult to contain.



[2]

Because they do not break down and can accumulate over time in the environment and in the human body, they are called "forever chemicals." Due to the omnipresence of PFAS in our environment, traces of these chemicals have routinely now been detected in human breast milk, umbilical cord blood, and bloodstreams of 98% of humans in the United States.[3]

B. Uses for PFAS Products in Household, State and Military Products

PFAS have been used in numerous products across various industries since their invention in the 1930s.[4] They have been utilized in stain-resistant coatings, non-stick cookware, water-repellant fabrics, stain-resistant fabrics and carpets, fire-fighting foam, food packaging, some

---

[2] Image by the North Carolina PFAS Testing Network, available at: https://epi.dph.ncdhhs.gov/oee/a_z/genx.html

[3] National Institutes of Health, *Polyfluoroalkyl Chemicals in the U.S. Population: Data from the National Health and Nutrition Examination Survey (NHANES) 2003–2004 and Comparisons with NHANES 1999–2000,* available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2072821/

[4] Interstate Technology and Regulatory Council, *History and Use of Per- and Polyfluoroalkyl Substances (PFAS),* available at: https://pfas-1.itrcweb.org/fact_sheets_page/PFAS_Fact_Sheet_History_and_Use_April2020.pdf

cosmetics, and cleaning products. Some recognizable brand names made with PFAS include Gore-Tex, Teflon, and Scotchgard.

PFOA and PFOS, which are called long-chain PFAS, are no longer manufactured in the United States and have been banned by many countries worldwide. However, even as manufacturers move away from manufacturing the versions of PFAS known to cause harm to humans and the environment, newer versions of PFAS have also recently been discovered to cause harm. One such newer version of a "short-chain" PFAS that was hoped to be safer than its predecessors is called "GenX."

GenX is a trade name for one unregulated PFAS used in manufacturing nonstick coatings and for other purposes. GenX, developed to replace PFOA, is used in food packaging, paints, cleaning products and fire-fighting foam. It is also produced as a byproduct of certain manufacturing processes. The Chemours Company ("Chemours") operates one of the largest producers of GenX in the world at a production site near the Cape Fear River in Fayetteville, North Carolina. While certain studies have found GenX to be less toxic than PFOA, it has neverhteless been linked to serious health issues such as liver damage. It is anticipated that alternative short-chain PFAS and their byproducts will continue to be a source of bodily injury and property damage claims. GenX has also been added to the EU list of "substances of very high concern," the first step in increased regulatory controls.

C. Health Issues Caused by PFAS

One of the most extensive studies analyzing the link between PFAS exposure and adverse health outcomes was conducted by the "C8 Science Panel," a group of epidemiologists formed as part of settlement of a class action between DuPont and residents of a community near a DuPont facility that released significant amounts of PFOA over a period of decades (that case, the "C8 MDL," is discussed in greater detail in section III. A. 1.).

The C8 Science Panel conducted eleven epidemiological studies over a period of eight years. At the conclusion of the eight-years of study, C8 Science Panel concluded that there existed a "probable link" between PFOA exposure and diagnosed high cholesterol, ulcerative colitis, thyroid disease, testicular cancer, kidney cancer, and pregnancy-induced hypertension. The C8 Science Panel defined the phrase "probable link" to mean that given the available scientific evidence, it is more likely than not that among the class members studied by the Panel, a connection existed between PFOA exposure and a particular human disease. The C8 Science Panel's research has since resulted in dozens of articles discussing potential links between PFAS exposure and adverse health outcomes. Their research has been corroborated or expanded upon by additional studies over the past decade.

Currently, the U.S. Environmental Protection Agency reports an expanded list of health issues stemming from PFAS exposure, stating that "peer-reviewed scientific studies have shown that exposure to certain levels of PFAS may lead to decreased fertility or increased high blood pressure in pregnant women, developmental effects or delays in children, including low birth weight, accelerated puberty, bone variations, and behavioral changes, increased risk of prostate,

kidney, and testicular cancers, decreased immune response, and hormone interference."[5] At the same time, the USEPA acknowledges that "research is still ongoing to determine how different levels of exposure to different PFAS can lead to a variety of health effects."

Indeed, the scientific community is not unanimous in assessing the strength of the purported link between PFAS exposure and adverse health effects. For example, the Australian government formed an Expert Health Panel for PFAS in 2018 which surveyed 20 recently published reports and academic reviews regarding human health effects and PFAS exposure. That panel ultimately determined that "there is no current evidence that supports a large impact on a person's health as a result of high levels of PFAS exposure [and] the evidence for PFAS exposure and links to health effects is very weak and inconsistent [but] important health effects for individuals exposed to PFAS cannot be ruled out based on the current evidence."[6] Essentially, the Australian government acknowledged the evidence linking PFAS exposure to adverse health effects, but found such evidence to be too weak to establish any type of conclusive link between PFAS and human disease.

While the scientific research continues to evolve, governmental agencies have already begun to take action based upon the potential link between PFAS adverse health effects. Over the coming years, it may become commonplace for state and local regulatory agencies to issue consumption warnings with regard to certain food and animals harvested in PFAS-contaminated areas. For example, in early March of 2022, the Wisconsin Department of Natural Resources advised fishermen in the Black Earth Creek region to limit their consumption of brown trout fished in the area due to elevated levels of PFOS in the Black Earth Creek waterway. Similar warnings will continue to be issued in areas where water, livestock, and game animals have been exposed to PFAS substances.

II. UNDERLYING LITIGATION STEMMING FROM THE MANUFACTURING AND USE OF PFAS

The manufacturing and use of PFAS-containing substances has generated broad and expansive litigation across the United States. Broadly, these lawsuits are brought by individuals, state attorney generals, public utility providers, and property owners, alleging bodily injury and property damage resulting exposure to PFAS. While each case has its own unique fact pattern, these suits generally fall into one of three categories:

1. **Environmental pollution claims against chemical manufacturers of PFAS substances**. These are claims solely against chemical manufacturers such as 3M Company and E.I. du Pont de Nemours and Company ("DuPont") arising out of PFAS exposure caused by the creation of PFAS chemicals (*e.g.,* PFOS, PFOA, or

---

[5] Environmental Protection Agency, *Our Current Understanding of the Human Health and Environmental Risks of PFAS,* available at: https://www.epa.gov/pfas/our-current-understanding-human-health-and-environmental-risks-pfas

[6] Australian Government Department of Health, *Expert Health Panel for PFAS Report*, available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/C9734ED6BE238EC0CA2581BD00052C03/$File/summary-panels-findings.pdf

GenX) at a chemical manufacturing facility or waste disposal site that resulted in environmental contamination in the surrounding area.

2. **Environmental pollution claims against down-stream products manufacturers that incorporate PFAS into other products.** These are pollution claims against the manufacturers of products that were created with the use of PFAS substances, such as waterproof shoes, fabric stain repellents, or carpeting. These claims sometimes, but not always, include the chemical manufacturer of the at-issue PFAS substance.

3. **Bodily injury claims against products manufacturers arising out of the use of PFAS-containing products.** These are bodily injury claims made by the end user of PFAS-containing products (*e.g.*, firefighters that used PFAS-containing firefighting foam, or consumers of PFAS-containing cosmetics). These claims sometimes, but not always, include the chemical manufacturer of the at-issue PFAS substances.

Naturally, the primary target defendants in the claims involving contamination emanating from chemical manufacturing facilities are PFAS manufacturers such as 3M, DuPont, Chemours, Solvay S.A., Ciba Specialty Chemicals, Inc. (now BASF Corp.), and Arkema.

The list of target defendants in the product lawsuits are much more diverse, as PFAS substances were (and are) broadly used across multiple industries for decades. To date, the product lawsuits have most significantly impacted the fire safety industry with suits against the manufacturers of the firefighting foam known as Aqueous Film-Forming Foam ("AFFF") as well as the manufacturers of PFAS-containing protective gear used by firefighters. The target defendants in these cases include National Foam, Inc., Chemguard, Ansul (now Tyco), Buckeye Fire Equipment, Kidde, and Dynax. Aside from the fire safety industry, the product lawsuits have targeted an expanding list of industries including shoe manufacturers (*e.g.*, Wolverine Worldwide), plastics companies (*e.g.*, Saint-Gobain Performance Plastics), carpet manufacturers (*e.g.*, Shaw Industries), paper mills (*e.g.*, Sappi Limited), and cosmetic manufacturers (*e.g.*, L'Oreal). We provide a list of representative defendants in Appendix A.

A. The First Wave Of PFAS Lawsuits Alleging Pollution And Contamination

While the expansion of PFAS litigation in recent years has largely been in the products sector, that expansion is a direct result of significant settlements that occurred in the 2010s in cases against chemical manufacturers DuPont and 3M. In this section, we discuss the major suits in the chemical manufacturing sector that settled over the past decade, and the major suits that remain pending across the U.S.

1. DuPont and its Related Entities Have Paid More than $1 Billion to Resolve Claims Stemming from a Chemical Manufacturing Facility in Parkersburg, West Virginia

One of the first major PFAS cases in the U.S. involved a DuPont manufacturing facility where DuPont allegedly discharged C-8 (PFOA) into the water and unlined landfills from its

Washington Works Plant near Parkersburg, West Virginia. The resolution of that case, which ultimately resulted in the formation of federal multi-district litigation, received mass media attention in the U.S. and was ultimately the backdrop of the 2019 film *Dark Waters*.[7]

In 1951, DuPont began using PFOA in its manufacturing processes at the Washington Works Plant. Over the decades that followed, DuPont allegedly discovered PFOA's toxicity and found evidence of birth defects, leukemia deaths, kidney cancer, and other ailments among its workers that handled PFOA. Despite this knowledge, DuPont purchased a tract of land from a local cattle rancher in the 1980s to use as a landfill for waste from the Washington Works Plant. The land in question contained a stream that connected with the Ohio River. The rancher began observing pollution in the stream, and inexplicable deaths and diseases among his livestock. The rancher eventually brought a suit against DuPont in 1998 which settled for an undisclosed sum in 2001. However, in the course of discovery in the cattle rancher's lawsuit, DuPont disclosed internal documentation that allegedly reflected knowledge of PFOA exposure in the Parkersburg, West Virginia area and associated health issues.

As a result of the disclosure of DuPont's alleged internal knowledge of the dangers of PFOA, a group of individuals residing in the Ohio River area brought a class action against DuPont related to DuPont's contamination of their drinking water with PFOA in *Leach v. E. I. Du Pont de Nemours & Co.*, No. 01-C-608 (W. Va. Cir. Ct. Wood County Aug. 31, 2001) ("Leach Case"). In 2002, the West Virginia trial court certified the *Leach* Case as a class action (the "Leach Class"), and in 2004 the parties executed a settlement agreement worth $342.6 million[8] (the "Leach Settlement Agreement") that funded research, infrastructural improvements, and medical monitoring while leaving the door open for future personal injury claims in the event that the medical science established a link between PFOA exposure and human disease.

Specifically, the settlement agreement provided an initial $70 million cash payment to the Leach Class (with $20 million earmarked for health and education projects); $22.6 million in legal fees; $10 million in water treatment technologies; $5 million to fund the "C8 Science Panel" discussed in Section II.C. above; and an additional $235 million for a medical monitoring program if the C8 Science Panel identified a link between PFOA exposure and human diseases. Further, if the C8 Science Panel identified such a link, the Leach Class retained their right to file personal injury suits against DuPont for PFOA exposure. If no such link was established, the class members waived their right to bring future personal injury claims against DuPont.

After eight years of study, the C8 Science Panel identified a probable link between PFOA and six human diseases: kidney cancer, testicular cancer, thyroid disease, ulcerative colitis, hypercholesterolemia, and pregnancy-induced hypertension and preeclampsia ("Linked Diseases"). Following the Panel's determination, the Leach Class members that had been diagnosed with any of the six linked diseases began to file claims against DuPont. In 2013, the

---

[7] Nathaniel Rich (January 6, 2016) "The Lawyer Who Became DuPont's Worst Nightmare" https://www.nytimes.com/2016/01/10/magazine/the-lawyer-who-became-duponts-worst-nightmare.html, *The New York Times Magazine*

[8] For a complete list of public and non-confidential settlements in PFAS suits to date, please refer to Appendix B.

U.S. Judicial Panel on Multidistrict Litigation transferred a subset of cases that originated in *Leach* to the U.S. District Court for the Southern District of Ohio as *In re: E. I. Du Pont De Nemours And Company C-8 Personal Injury Litigation,* MDL 2433 (the "C8 MDL").

Following the C8 Science Panel's findings, DuPont created Chemours in July of 2015 by transferring DuPont's "performance chemicals" business line to the newly created entity. In addition to the transfer of assets, Chemours accepted broad assumption of many liabilities for DuPont's use, manufacture, and discharge of PFAS. This maneuver has since come under fire from several state Attorney Generals who have brought lawsuits seeking to unwind the transfer of liability from DuPont to Chemours as an attempt to fraudulently limit DuPont's liability for decades of PFAS-related liability. While those attempts remain ongoing, DuPont and Chemours have created a joint $4 billion fund to address PFAS liabilities.

In February 2017, DuPont and Chemours announced that they had jointly agreed to settle the existing claims in the MDL for $670.7 million, with half being funded by Chemours and half being funded by DuPont. The settlement funded payments to 3,550 class members demonstrating one of the six Linked Diseases. As to the remaining 70,000 class members who had previously filed claims related to alleged PFOA-related ailments (but not one of the six Linked Diseases), the agreement stated that DuPont and Chemours were "forever discharge[d] from any and all claims" from those class members. However, the settlement did not prevent individuals from filing subsequent individual cases (*i.e.,* not class actions) if they did not receive compensation in the settlement agreement.

Since the 2017 settlement, nearly one hundred such individual cases were filed and transferred to the C8 MDL that allegedly involved Linked Diseases. On January 22, 2021, the DuPont entities announced that they agreed to resolve all but one of the additional cases in the C8 MDL. Pursuant to the agreement, the DuPont companies agreed to pay an additional $83 million in exchange for resolution of 95 ongoing proceedings in the MDL. Together, the $342.6 million Leach Settlement Agreement, $670.7 million 2017 settlement, and $83 million 2021 settlement amount to well over $1 billion in loss paid by DuPont and Chemours related to the C8 MDL.

As of this writing, only one case remains pending in the C8 MDL (and the lone case not resolved by the 2021 settlement): *Abbott v. E.I. du Pont de Nemours and Co., et al.,* Case No. 2:17-cv-00998 (S.D. Ohio). In *Abbott*, a jury awarded the Plaintiff $50 million in March 2020. DuPont unsuccessfully sought a mistrial among various other post-trial motions, and subsequently filed an appeal that remains pending in the U.S. Court of Appeals for the Sixth Circuit.

2. 3M and the State of Minnesota Agreed to an $850 Million Settlement Arising out of 3M's PFAS Manufacturing Operations in the State

While the C8 MDL against DuPont was ongoing, the State of Minnesota brought suit against 3M in what would ultimately result in the second largest PFAS-related settlement behind only the C8 MDL. In 2010, the Attorney General of Minnesota brought suit against 3M in an action captioned *State of Minnesota, et al v. 3M Company*, Case No. 27-cv-10-28862 (Hennepin County) seeking, among other things, recovery of national resource damages caused by PFAS emanating from 3M's manufacturing and/or disposal operations in the Minnesota towns of Cottage Grove, Woodbury, Lake Elmo, Oakdale.

The *State of Minnesota* case alleged that 3M, a Minnesota corporation, developed and manufactured PFAS substances in Minnesota for over 60 years for use in 3M and other corporations' products. The State alleged that these manufacturing operations resulted in a "positive association" among 3M employees between PFAS exposure and prostate cancer, cerebrovascular disease, and diabetes. 3M was alleged to have known about the link between PFAS exposure and human diseases, but did not change its operations accordingly. Further, 3M's manufacturing activities allegedly led to significant soil, groundwater, and surface water pollution that resulted in residents of Minneapolis and St. Paul (the largest cities in the state) showing elevated PFAS levels in blood tests when compared to the rest of the U.S. population.

As the case proceeded, the State developed evidence linking low birth weights, premature births, and infertility with the areas of the State most affected by 3M's PFAS manufacturing operations. 3M pushed back strongly on such claims, and generated research and showing no such links existed - a position which it maintains to this day.[9]

On the day the parties were set to begin jury selection in February of 2018, 3M agreed to an $850 million settlement with the State that resolved the $5 billion damages claim the State was prepared to seek at trial. The settlement took the form of a grant from 3M to the State that was paid in one lump sum, which the State was to use for drinking water and water sustainability projects in the areas affected by 3M's PFAS manufacturing operations. The grant was in addition to any environmental remediation costs incurred by 3M in those areas. The State of Minnesota's Department of Natural Resources and the Minnesota Pollution Control Agency are co-trustees of the settlement funds, and their efforts to disburse the settlement proceeds for government projects are ongoing.

3. Additional PFAS Lawsuits Remain Pending Across the United States

With the C8 MDL and *State of Minnesota* cases resulting in significant settlements paid out by PFAS manufacturers, there has been a predictable uptick in lawsuits from residents and governmental entities in other areas where PFAS substances were produced. The most significant pending litigation includes the following:

(a) 3M's PFAS Manufacturing Operations in Decatur, Alabama

Since the 1960s, 3M has operated a manufacturing facility in Decatur, Alabama that has served as a production hub for PFAS substances. The allegations against 3M in Alabama mirror the allegations of the *State of Minnesota* case: 3M knew that the chemicals it was producing were toxic, knew that that toxicity was affecting its employees, but nonetheless continued to produce and dispose of the chemicals in a manner that was unsafe for employees and residents in the surrounding area.

[9] "3M's Commitment to PFAS Stewardship" https://www.3m.com/3M/en_US/pfas-stewardship-us/health-science/

The first PFAS suit against 3M in Alabama was a 2002 lawsuit captioned *St. John v. 3M Co.,* Case No. CV-2002-000408 (Morgan County, AL). The *St. John* case was a purported class action brought on behalf of owners of property in the Decatur area contaminated with PFAS. *St. John* alleged that 3M and other defendants' operations contaminated property near 3M's manufacturing facilities in Decatur and provided contaminated "sludge" for area farms to use as fertilizer. Shortly after *St. John* was filed, the case was stayed for over a decade while co-defendant Synagro Technologies went through bankruptcy proceedings.

While the *St. John* case was dormant, an environmental group named Tennessee Riverkeeper, Inc. filed suit in 2016 against 3M in an action captioned *Tennessee Riverkeeper, Inc. v. 3M Company, et al.*, No. 5:16-cv-01029-AKK (N.D. Ala.) alleging violations of the Resource Conservation and Recovery Act. The *Riverkeeper* lawsuit sought declaratory and injunctive relief related to the disposal of PFAS in and around 3M's Decatur facilities.

After the stay in *St. John* was lifted, the *St. John* and *Tennessee Riverkeeper* cases were jointly resolved in October 2021 for a reported $99 million settlement that addressed the concerns of the plaintiffs in both cases. The settlement funds were earmarked toward community redevelopment and recreation projects in the area to build a new public recreational facility, parks, and other projects in the city of Decatur. Additionally, 3M agreed to "continue to address PFAS" at the sites where its chemicals were dumped, and agreed to reimburse the City of Decatur and Morgan County for the costs incurred related to PFAS remediation.

Also in October 2021, 3M resolved longstanding litigation with the West Morgan-East Lawrence Water and Sewer Authority (a public utility provider in the Decatur area) and its customers in *West Morgan-East Lawrence Water and Sewer Authority, et al. v. 3M Company, et al*., Case No. 15-cv-01750 (N.D. Ala.). The *West Morgan* case was settled by separate payments of $35 million (to the Authority) and $12 million (to the customers). The settlements funded the purchase of a new water filtration system for the Authority, while providing the Authority's customers settlement amounts between $50 and $745.

Still, the *St. John, Tennessee Riverkeeper*, and *West Morgan* settlements did not terminate 3M's exposure related to its Decatur, Alabama facility. As of this writing, additional PFAS suits in Alabama remain pending in the following cases: *Fleming, et al. v. 3M Company, et. al.,* Case No. 6:22-cv-00385 (N.D. Ala.); *Chandler v. 3M Company Inc., et al.*, Case No. CV04-785 (Morgan County); *Stover v. Synagro WWT, Inc.*, Case No. CV-2009-900005 (Franklin County); *Owens, et al v. 3M Company, Inc., et al.*, Case No. 42-cv-2017-900015 (Lawrence County); *King v. West Morgan-East Lawrence Water and Sewer Authority, et al.*, Case No. 17-cv-1822 (N.D. Ala.); and, *Daniel, et al v. 3M Company, Inc., et al*, Case No. 42-cv-2020-900021 (Lawrence County).

(b) **DuPont's Manufacturing of GenX Chemicals in North Carolina**

Beginning in the early 1970s, DuPont owned and operated the Fayetteville Works industrial facility in Fayetteville, North Carolina. In 2015, DuPont transferred ownership of the Fayetteville Works to Chemours. The Fayetteville Works is a chemical plant that produces a variety of chemicals, including PFAS substances, and discharges wastewater into the adjacent Cape Fear River. Specifically, Fayetteville Works allegedly used PFOA in its manufacturing

processes until government regulation caused the phaseout of PFOA in the early 2000s. From that point forward, the Fayetteville Works has allegedly used PFOA replacement "GenX," which some allege is as toxic or more toxic than PFOA.

In *Nix v. The Chemours Company FC, LLC, et al.*, Case No. 17-cv-00189 (E.D.N.C.), a group of plaintiffs filed a purported class action against DuPont and Chemours comprised of all persons who live in the counties surrounding the Fayetteville, North Carolina area that are potentially affected by GenX pollution emanating from the Fayetteville Works. The *Nix* case alleges that GenX has caused property damage to the class members in addition to "trespass to bodily integrity." The *Nix* class seeks to recover compensatory damages, establishment of a medical monitoring fund, and other injunctive and equitable relief, and is set for briefing on class certification in April 2022. In addition to *Nix*, at least four other groups of plaintiffs have filed lawsuits in state and federal courts in North Carolina seeking damages for GenX pollution.

While the *Nix* case is brought on behalf of private citizens, utility providers and governmental entities have also brought litigation against DuPont related to GenX contamination in the area's water supply. In *Cape Fear Public Utility Authority, et al. v. The Chemours Company FC, LLC, et al.,* Case No. 17-cv-00195 (E.D.N.C.), a group of four municipalities and/or public utility providers seek damages from DuPont and Chemours arising out of alleged pollution of the Cape Fear River and the plaintiffs' water systems. In *State of North Carolina v. E.I. Dupont de Nemours and Co.*, *et al.*, Case No. 20-cvs-5612 (Cumberland County, NC), the Attorney General of North Carolina alleges that DuPont, Chemours, and additional defendants contaminated state lands and waterways with PFAS, despite the defendants' knowledge of the dangers posed by PFAS substances. The lawsuit seeks damages to investigate, remediate, and restore the PFAS-related damages caused by the Fayetteville Works, disgorgement of DuPont and Chemours' profits, equitable and injunctive relief, as well as seeking to void the transfer of DuPont's PFAS liabilities to Chemours. Both *Cape Fear* and *State of North Carolina* are in the initial stages of litigation, with the *State of North Carolina* case currently stayed pending resolution of numerous jurisdictional issues.

The North Carolina litigation against DuPont and Chemours is significant because it is the first major string of lawsuits against a PFAS manufacturer in the U.S. that directly involves contamination from GenX. While most litigation to date has involved GenX predecessors PFOA and PFOS, the North Carolina litigation raises a host of issues related to what DuPont did and did not know about the substance developed to replace PFOA and PFOS. Further, while the toxicity of PFOA and PFOS has been litigated in the C8 MDL and elsewhere, the North Carolina lawsuits will be the first major test of whether there is a sufficient link between GenX and actual or potential human disease to create liability for DuPont and Chemours. Further, since GenX chemicals were not introduced until the early 2000s, the North Carolina lawsuits could implicate insurers who were not otherwise on the risk for the PFOS and PFOA pollution that occurred in the 20th century.

(c) DuPont, Chemours, Solvay, and Arkema Have Been Sued in New Jersey Federal Court Related to the Operation of Chemical Manufacturing Sites in New Jersey

From 1891 to 2015, DuPont operated the Chambers Works plant at Carneys Point in Pennsville, New Jersey. Following the creation of Chemours in 2015, the operation of the facility

has been the responsibility of Chemours. The facility is a 1,455-acre complex located along the eastern shore of the Delaware River. Through their operations at the facility, DuPont and Chemours are alleged to have released PFAS – including PFOA – into the environment which has been found at nearby drinking wells. Chambers Works allegedly currently uses GenX, which has allegedly been found in private drinking wells in the area.

In the mid-1980s, Arkema built the West Deptford Plant along the Delaware River, in West Deptford, NJ. In 1985, Arkema began using a mixture of PFAS-substances at the West Deptford plant as part of its manufacturing of fluoroproducts. In 1990, Arkema sold the West Deptford plant to Solvay, which continued manufacturing of fluoroproducts at the facility.

Over the last two years, plaintiffs throughout the State of New Jersey have brought suits against DuPont, Chemours, Solvay, and Arkema arising out of alleged PFAS contamination emanating from the Chambers Works and West Deptford facilities. As the two manufacturing sites are separated by a mere 20 miles of shoreline on the Delaware River, most lawsuits filed to date of named all four entities as defendants that are potentially responsible for the area's purported PFAS contamination. As of this writing 20 lawsuits have been filed by New Jersey residents seeking damages for PFAS contamination emanating from the Chambers Works and West Deptford plants, with new suits being filed every month. These cases are in the very initial stages of litigation.

Additionally, the New Jersey Environmental Protection Agency has brought suits against all four parties in *New Jersey Dept. of Environmental Protection v. E.I. Du Pont de Nemours and Co. et al.*, Case No. 19-cv-14766 (D.N.J.) and *New Jersey Department of Environmental Protection et al. v. Solvay Specialty Polymers et al.*, Case No. GLO-L-001239-20 (Gloucester County, N.J.). The governmental suits seek recovery of PFAS clean-up costs incurred by the State, costs of future environmental monitoring, costs of abatement, injunctive relief (such as mandating compliance with laws and regulations), litigation costs, and – like the *State of North Carolina* case discussed above – seek to void the transfer of DuPont's PFAS liabilities to Chemours.

While the New Jersey cases are relatively undeveloped compared to some of the other cases discussed above, the litigation surrounding PFAS pollution emanating from the Chambers Works and West Deptford sites is sure to expand over the coming years. The area in question has a much higher population density than some of the other PFAS manufacturing sites given its close proximity to Philadelphia, PA and other east coast metropolitan areas. Further, the alleged use of GenX at the Chambers Works site broadens the scope of the lawsuits to include both old and new PFAS substances. Thus, the New Jersey cases may evolve into one of the key epicenters of PFAS litigation over the next decade.

(d) 3M Has Been Sued by the Attorney General of Illinois Arising Out of Its Cordova, Illinois Manufacturing Facility

The most recent lawsuit against a chemical manufacturer was filed by the State of Illinois against 3M on March 15, 2022 related to 3M's manufacturing operations in Cordova, Illinois. 3M operated its Cordova facility from 1970 through the present, and uses the plant to manufacture adhesives, resins, fluorochemicals and other specialty chemicals. In *Illinois v. 3M Company*, Case No. 2022-LA-16 (Rock Island County, Illinois), the State of Illinois alleges that 3M's negligent

operations at its facility in Cordova have resulted in significant levels of PFAS contamination at and around the facility, which is located on the Mississippi River. The lawsuit alleges that sampling conducted by 3M, the U.S. Environmental Protection Agency, and the Illinois Environmental Protection Agency (IEPA) has confirmed the presence of contaminated groundwater under and around the facility. In addition, 3M allegedly discharges more than 8 million gallons of contaminated wastewater directly into the Mississippi River each day, and wastewater sampling has shown levels of toxic PFAS in the wastewater.

While this case was only just filed, the pleadings state that Illinois is seeking to require 3M to clean up the contamination the area, civil penalties and fines, and damages related to PFAS contamination and injury to natural resources. While no individual personal injury cases have been filed yet related to the Cordova facility, such suits are likely to follow.

B. Lawsuits Arising from Products That Incorporate PFAS

While the largest PFAS settlements to date have involved chemical manufacturers, lawsuits seeking damages caused by pollution emanating from other manufacturing facilities are also pending throughout the country. In this section, we discuss the major suits pending and settled against manufacturers of products that incorporate PFAS substances.

(a) Wolverine Worldwide's Manufacturing of Shoes Made with PFAS Substances in Rockford, Michigan

For decades, Wolverine Worldwide operated a tannery in Rockford, Michigan that it used to manufacture "Hush Puppies" branded shoes. Beginning in the 1950s, Wolverine Worldwide purchased 3M's Scotchgard coating to waterproof its shoes. Until 2003, Scotchgard was made using PFOS, one of the most toxic PFAS substances that is now banned by most counties throughout the world. Wolverine Worldwide's Rockford tannery site was demolished in 2010 and 2011, which led to a group of Rockford residents to question what chemicals might be released as the facilities were torn down. In 2016 and 2017, soil and groundwater testing revealed significant PFOA and PFOS contamination, which led to water and fish advisories in the Rockford area.

Lawsuits soon followed, with a class action filed in 2017 in the U.S. District Court for the Western District of Michigan against Wolverine Worldwide and 3M on behalf of residents in the Rockford area captioned *Zimmerman v. The 3M Company*, Case No. 1:17-cv-1062. The *Zimmerman* plaintiffs seek injunctive relief, equitable relief, and compensation for property damage arising from alleged exposure to PFAS. While the *Zimmerman* case is set for trial in June 2022, all prior trial dates have been continued and the docket reflects that the case is being mediated.

In addition to the federal class action, approximately 280 individual state court cases were filed involving PFAS exposure emanating from the Rockford, Michigan site and consolidated in a matter captioned *In re Nylaan Litigation*, Case No. 17-10716-CZ pending in Kent County, Michigan. These cases assert tort and statutory claims for damages against Wolverine and 3M arising out of alleged bodily injury and property damage in addition to claims for medical monitoring and other equitable relief. Many of the cases consolidated into *In re Nylaan Litigation* have since settled, with the settlement sums deemed confidential.

Finally, the State of Michigan and other governmental entities also brought suit against Wolverine Worldwide related to PFAS contamination emanating from the Rockford tannery in *Michigan Department of Environmental Quality v. Wolverine World Wide, Inc.*, Case No. 1:18:cv-00039 (W.D. Mich.). Like the individual suits, the governmental claims alleged that Wolverine's shoe waterproofing process created contaminated waste that crept into surface water, soils and groundwater and sought to recover cleanup costs, injunctive relief and other damages. While the State did not name 3M in its complaint, Wolverine Worldwide added 3M as a third-party defendant. The case resolved in February 2020 with 3M agreeing to pay $55 million to Wolverine Worldwide to compensate it for cleanup costs, and Wolverine Worldwide agreeing to pay the various governmental entities a combined $113 million to fund infrastructural improvements and environmental investigation and remediation costs.

While many of the Michigan suits related to the Rockford facility have resolved, the *Zimmerman* case and many of the *In re Nylaan Litigation* cases remain pending. Between the disclosed settlement sums and those that remain confidential, it is likely that pollution from the Rockford tannery will result in over $200 million in liability before the entirety of the Wolverine Worldwide litigation concludes.

(b) New York Suits Arising Out of Honeywell and Saint-Gobain Performance Plastics Corporation's Plastics Incorporating PFAS

Between 1967 and 2003, the town of Hoosick Falls, NY contained a manufacturing site at the center of the village that used an aqueous solution containing PFOA to coat fiberglass fabric. While the ownership of the site, commonly referred to as "McCaffrey Street," changed hands over the decades, the parties that operated the site for the longest duration were predecessor corporations of Saint Gobain Performance Plastics and Honeywell, Inc. Notably, the McCaffrey Street site was close to the village's water treatment facility. In 2014, a local resident took samples of the village water supply to be tested for PFAS contamination at his own expense. When the samples showed high levels of PFOA, further testing ensued, which showed that local residents had PFOA blood serum concentration 23 times higher than the national average.

Shortly thereafter, Saint Gobain (the current owner of the facility) began supplying residents and business with free bottled water, and paid for water filtration systems for use in Hoosick Falls. In 2016, Saint Gobain and Honeywell also agreed to pay Hoosick Falls $850,000 in expenses the Village incurred after the initial contamination was exposed in 2014. The companies agreed to pay an additional $225,000 to the village in 2019.

Despite these initial attempts to reach out to the local community, what soon followed was the filing of over forty lawsuits in state and federal court, including a class action captioned *Baker et al. v. Saint Gobain Performance Plastics Corp. et al.*, Case No. 1:16-cv-00917, which sought certification of medical monitoring and property damages classes. The *Baker* case brought claims against both Saint Gobain and Honeywell, as well as 3M and DuPont as the potential manufacturers of the PFOA used at the McCaffrey Street site.

In 2021, the *Baker* case settled in part, with Saint Gobain, Honeywell, and 3M agreeing to contribute to a $65 million fund to resolve the class claims. DuPont did not participate in the

settlement agreement, and the claims against DuPont remain pending with the parties currently briefing class certification. Under the settlement, which received final approval in February 2022, Plaintiffs who say they suffered a drop in their property value starting in December 2015 are awarded a combined sum of over $20 million. Nearly $23 million will fund a 10-year program to monitor the health of residents who drank town water from 1996 to 2006. About $8 million will go to class members who claimed a private nuisance, and approximately $14 million toward fees and expenses.

Even with the *Baker* case partially resolved, dozens of claimants have opted to maintain their pending individual claims as opposed to participating in the settlement class. These cases, along with the claims against DuPont in *Baker*, remain pending and will keep the Hoosick Falls PFAS litigation active for years to come.[10]

(c) Lawsuits Pending in Alabama and Georgia Arising Out of the Manufacturing of Carpets Made with PFAS Substances

Dalton, Georgia is a small town in Northern Georgia that is often referred to as the "Carpet Capital of the World" due to the over 150 carpet manufacturing plants located in the area, including industry leaders Shaw Industries and Mohawk Industries. These carpet plants supply over 90% of the world's carpet and have allegedly been polluting the region for decades with PFAS used to make carpeting stain resistant. The waste from the carpet manufacturing ultimately feeds into the Conasauga River, which in turn supplies water to numerous waterways. These waterways supply water to numerous towns and cities in Georgia and Alabama.

As PFAS-related pollution concerns spread throughout the country over the last decade, numerous municipal water suppliers throughout the region have filed suits against chemical manufacturers and carpet manufacturers, including *The Water Works and Sewer Board of the City of Gadsden v. 3M et al.*, Case No. 4:2016cv01755, a case pending in Alabama state court alleging that PFAS from the carpet facilities allegedly resulted in damage to the Conasauga River, which is utilized by the City as a water source. The *Gadsden* case is currently set for trial on October 3, 2022 and may be the first carpet manufacturing case to resolve through settlement or trial.

However, the most significant development out of the carpet manufacturing cases to date is from *Johnson v. 3M*, 4:20-CV-8-AT, 2021 WL 4745421 (N.D. Ga. Sept. 20, 2021), a class action wherein water customers were seeking damages from chemical manufacturers, carpet manufacturers, and water suppliers for causing the class members to consume contaminated drinking water. Buried in a lengthy ruling on twelve separate motions to dismiss, the court held that under Georgia law, the class could not sustain negligence claims against the chemical manufacturers (*e.g.,* 3M and DuPont) because the chemical manufacturers had no duty to protect the class members from harm resulting from the carpet manufacturers' negligent use or disposal of PFAS.

[10] A separate but similar set of cases to the Hoosick Falls litigation emerged from the town of Petersburgh, New York, where plastics company Taconic Plastics (formerly Tonoga, Inc.) agreed to pay $23.5 million to settle a class-action lawsuit in October 2021 alleging that PFAS emanating from a plastics manufacturing facility polluted the town's water supply from 1961 to 2013. This case is discussed in greater detail in Section V.A.(a) below.

In essence, the court ruled that because the chemical manufacturers did not pollute the water sources in question nor could have they foreseen that the carpet manufacturers would have engaged in such pollution, the chemical manufacturers had no legal obligations to the class members. Thus, the court dismissed the class's negligence claims against the chemical manufacturers.

While the *Johnson* ruling is being appealed, it could have significant ripple effects across the country if it is upheld and the principles set forth in *Johnson* extend beyond Georgia law. For the first time, a court adopted the argument that a PFAS manufacturer is not liable for supplying PFAS to a product manufacturer, even if the product manufacturer's use of that PFAS potentially caused extensive damages. Any court that adopts such an argument would likely be shielding 3M, DuPont, and other chemical manufacturers from millions of dollars in liability.

C. Cosmetics, firefighting foam, and food container litigation

While lawsuits arising from the use of PFAS-containing consumer goods (*e.g.*, cosmetics) are just beginning, the largest set of PFAS cases in the country is the AFFF MDL, where the use of PFAS-containing firefighting foams and resulting damages is at issue. As discussed in greater detail below, the AFFF MDL now involves over 3,000 claims with a set of bellwether claims currently scheduled for trial in 2023.

(a) The Aqueous Film-Forming Foam (AFFF) MDL Involves Over 3,000 Consolidated Lawsuits

AFFF is a firefighting foam that was developed in the late 1960s by the United States Navy and was designed to extinguish flammable liquids, including oil, gasoline, diesel, and propane, by using PFAS substances such as PFOA and PFOS as a surfactant. AFFF has been widely used at airports, military bases, oil and gas refineries, and both firefighting and emergency response training facilities.

As early as 2000, plaintiffs began filing lawsuits alleging personal injury due to exposure to PFAS-containing AFFF and various forms of property damage arising from contaminated groundwater near various military bases, airports, and industrial sites where AFFF was used to extinguish liquid fuel. The target defendants in these cases include chemical manufacturers like 3M and DuPont, as well as product manufacturers in the fire safety industry that manufactured and sold the AFFF itself. A complete list of AFFF defendants is included within the list of defendants attached as Appendix A.

In December 2018, the U.S. Judicial Panel on Multidistrict Litigation granted motions to transfer and consolidate most AFFF cases pending in various federal courts to the United States District Court for the District of South Carolina, as *In re: Aqueous Film-Forming Foams (AFFF) Products Liability Litigation*, MDL No. 2873 (the "AFFF MDL"). A majority of the 3,000 claims pending in the AFFF MDL have been filed by firefighters who allege to have been exposed to PFAS while using AFFF products. However, plaintiffs in these cases also include individual residents, public and private water suppliers, AFFF customers, state attorneys general, and other sovereign entities. The various lawsuits include claims of personal injury, medical monitoring,

negligent discharge, and property damage, and seek compensatory punitive damages, diminution of property value, and abatement.

Currently, the parties in the AFFF MDL are engaged in two significant tasks that will shape the future of the AFFF litigation: (1) the parties are briefing summary judgment motions filed by all defendants as to whether the "government contractor" defense bars liability as a whole, and (2) preparing three bellwether cases for trial as early as January 2023.

As to summary judgment, the government contractor defense provides immunity to government contractors who manufacture products to specifications required by the federal government. While the bar to receive the benefit of the defense is high, the defense itself is broad and could potentially provide complete immunity to any defendant able to prove its elements. To receive the protection provided by the defense, the defendants must show: (1) the federal government approved "reasonably precise specifications" for the equipment; (2) the equipment conformed to those specifications; and (3) the supplier warned the federal government about dangers in the use of the equipment known to the supplier but not to the government itself. The AFFF MDL Court has decided to have the parties brief the government contractor issue in piecemeal fashion, with the "reasonably precise specifications" issue currently being briefed. If the Defendants are successful on the first issue, the court will order briefing for the next elements of the defense.

As to a potential January 2023 bellwether, an initial pool of three cases have been selected, and the parties in the MDL are currently conducting discovery. In each of the three bellwether cases, the plaintiff is a municipal water supplier alleging that its water supply was contaminated by AFFF use, including: the Town of Ayer (MA), City of Sioux Falls (SD), and City of Stuart (FL). Each of the three potential bellwethers includes a similar fact pattern, alleging that PFAS found in the city's water supply came from firefighting foam manufactured and distributed by the defendants. The municipalities allege that the makers of AFFF were aware of the health risks associated with the component chemicals but failed to properly warn of their toxicity. As a result, municipal firefighters used the product for years, unaware of the dangerous chemicals that were contaminating the local water supply. The MDL court is expected to identify the first bellwether case in September 2022.

While the vast majority of AFFF claims remain pending, two significant settlements have occurred in AFFF cases to date. First, in *Campbell, et al. v. Tyco Fire Products LP., et al.*, Case No. 2:19-cv-00422 (D.S.C.), residents of Peshtigo, Wisconsin reached a $17.5 million settlement with product manufacturers Tyco Fire Products, Chemguard, and ChemDesign in January 2021 that marked the first AFFF settlement in the country. Tyco operated an outdoor testing facility in the Peshtigo area which allegedly caused extensive AFFF contamination throughout the region. Just two months later, 3M reached a settlement with the City of Bemidji, Minnesota wherein the company paid $12.5 million to resolve the City's yet-to-be-filed lawsuit related to AFFF contamination emanating from a nearby airport. While the two settlements provide a small sample of the over 3,000 AFFF pending in the MDL, the eight-figure settlements in both cases show the potential for significant exposure in the AFFF MDL if the defendants' government contractor defenses fail and/or the initial pool of bellwethers result in significant plaintiffs' verdicts.

(b) Lawsuits Arising Out of PFAS-Containing Cosmetics

A more recent target of PFAS lawsuits is the cosmetics industry, where four suits have been filed over the last four months seeking damages caused by the use of PFAS in cosmetic products. On June 15, 2021, the Journal of Environmental Science and Technology Letters published a study finding that PFAS substances were present in over half of the cosmetic products sold in the U.S. On the same day, the U.S. Senate introduced the "No PFAS in Cosmetics Act," a bill that aims to ban the use of intentionally added PFAS substances in cosmetic products sold in the U.S. While the bill has not become a law, the increased focus on PFAS in cosmetics resulted in a series of lawsuits against major players in the cosmetics industry that will likely continue to grow in the coming months.

On December 14, 2021, a group of plaintiffs filed a class action lawsuit in New York against Shiseido Americas Corporation alleging that its bareMinerals brand of cosmetics falsely advertised its products as "clean and conscious", "pure" and "free of harsh chemicals" due to the presence of PFAS in the products. The lawsuit, captioned *Onaka v. Shiseido Americas Corp.*. Case No. 21:-cv-10665 (S.D.N.Y.), was the first PFAS lawsuit targeting the cosmetics industry. Two weeks later, Toxin Free USA (a non-profit) filed a lawsuit in the District of Columbia against CoverGirl and Coty, Inc. in which the organization alleged that the companies falsely advertised some of their cosmetics products as safe and environmentally friendly despite the presence of PFAS in their products. Similar lawsuits were filed in February 2022 against L'Oreal USA, Inc. and Burt's Bees Company (along with parent, Clorox) in California federal courts.

These suits, which are mostly based on fraudulent advertising as opposed to personal injury, are likely only the beginning for the cosmetics industry. Not only could similar lawsuits be filed against other cosmetics manufacturers, but the claims will likely extend to personal injuries caused by the use of PFAS-containing cosmetics, and potentially environmental pollution claims arising from the manufacturing of PFAS-containing cosmetics.

(c) McDonald's Packaging Containing PFAS

The most recent target of PFAS litigation is the fast-food industry, where containers, wrappers, packaging, and food items themselves are alleged to have contained PFAS. Over the last year, fast-food giants such as McDonald's, Wendy's, and Burger King all announced that they planed to eliminate the use of PFAS in their products and packaging. Nonetheless, on March 28, 2022, the first lawsuit targeting the fast-food industry was filed in *Clark v. McDonald's Corporation*, Case No. 3:22-cv-628 (S.D. Ill.).

In *Clark*, the plaintiffs allege that McDonald's has been using PFAS such as 3M's Scotchban in its packaging products since the 1990s. Further, the plaintiffs allege that studies have identified high PFAS levels in McDonald's food products such as the Big Mac, French fries, and cookies. Despite the prevalence of PFAS in its products and packaging, the *Clark* lawsuit alleges that McDonald's has concealed their use of PFAS and otherwise represented that its products are high quality and safe to consume. The *Clark* lawsuit is a class action brought on behalf of purchasers of McDonald's products in Illinois, California, Florida, Massachusetts, Minnesota, Missouri, New Jersey, New York, Pennsylvania, Oregon, and Washington (all states with similar consumer protection laws).

Like the cosmetics cases discussed above, the *Clark* case is focused on McDonald's alleged consumer fraud and deceptive trade practices, and does not allege specific bodily injury suffered by consumers of McDonald's PFAS-containing products. However, like all other areas of PFAS litigation to date, the litigation against McDonald's will expand to include other entities in the fast-food sector and future suits may involve claims for bodily injury or property damage.

III. REGULATORY DEVELOPMENTS FOR THE MANUFACTURE OF, USE OF, AND TESTING FOR PFAS

In the late 1990s, 3M notified the U.S. Environmental Protection Agency that its internal research showed that PFOS can build up in the blood serum of people exposed to the chemical. Although 3M contended that such build up was not linked with any adverse health effects, 3M's disclosure led the EPA to audit 3M's internal studies and begin conducting research of its own. From that point forward, the EPA, in addition to state and local governments, have passed laws, policies, and regulations aimed at reducing the prevalence of PFAS in the environment and exposures to PFAS. The key historical regulations – and most recent developments – are discussed in greater detail below.

A. Regulatory Activity in the United States

1. The EPA First Began Regulating PFAS in 2002 and Issued Periodic Guidance From 2002 to 2019

Under U.S. law, the EPA has the authority to regulate PFAS through the Toxic Substances Control Act (TSCA), the Safe Drinking Water Act (SDWA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and other regulatory authorities. Since the early 2000s, the EPA has used each of these statutes curtail PFAS pollution, but environmental activists have continuously criticized the EPA for not doing enough to regulate PFAS use and exposure throughout the U.S.

The first wave of U.S. PFAS regulation began in 2002 when the EPA used the TSCA to introduce Significant New Use Rules (SNURs), which required manufacturers to provide the EPA with a notification about the manufacture or import of 13 PFAS chemicals, including PFOA. In 2003, the EPA required 3M and DuPont to produce memoranda of understanding detailing the chemical manufacturers' plans to stop using the substances identified in the SNURs. By 2006, the list of manufacturers working with the EPA expanded to include Arkema, Asahi, BASF Corp. (as successor to Ciba), Clariant, Daikin, and Solvay. Together, the EPA and the chemical manufacturers agreed to eliminate 95% of PFOA emissions by 2010 with complete elimination by 2015. Still, the EPA's regulatory activity under the TSCA did little more than accelerate the phaseout of the use of PFOA and PFOS, which was already underway by 2002. The SNURs did not address the production or release of GenX or any other product that was being used to replace the use of PFOA or PFOS.

The EPA's regulation of PFAS through the SDWA began in 2009, when the EPA released provisional health advisories for PFOS and PFOA. Between 2013 and 2015, the EPA monitored levels of PFOS, PFOA, and PFNA in drinking water supplies as part of its unregulated contaminant

monitoring. In 2016, the EPA issued a drinking water health advisory level of 70 parts per trillion (ppt) for PFOS and PFOA. The EPA's health advisory is non-enforceable and non-regulatory, but is intended to provide technical information to state agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water PFAS contamination. Several states, including Alaska, Colorado, Connecticut, Delaware, Maine, New Mexico, and Ohio, have adopted the EPA's recommended 70 ppt PFAS concentration limitation for drinking water.

In February 2019, the EPA released its PFAS Action Plan, outlining the steps the EPA was taking to curb PFAS contamination and protect the health of U.S. citizens. The plan stated that the EPA was moving forward with the regulatory process to set maximum contaminant levels (MCLs) for PFOA and PFOS, but again failed to address GenX and other potentially toxic PFAS substances. The PFAS Action Plan suggested that the EPA would pursue the process for designating PFOA and PFOS as hazardous substances under CERCLA or Superfund, which could hold companies liable for the cleanup of hazardous substances that they released into the environment. However, the EPA did not complete the regulatory processes to set MCLs for PFOA and PFOS or to designate PFOA and PFOS as hazardous substances under CERCLA at that time.

The failure to act on the PFAS Action Plan in 2019 drew criticism from federal lawmakers and environmental activists who expressed growing frustration with the EPA's response to PFAS contamination. While dozens of bills were introduced in Congress in 2019 and 2020 aimed at regulating PFAS exposure, none were ultimately passed.

2. PFAS Focus of the Biden Administration and the Introduction of the PFAS Strategic Roadmap

With the Biden administration taking over the EPA in 2021, regulation of PFAS in the U.S. has reemerged as a priority for the EPA. In September 2021, the EPA released its Multi-Industry Per- and Polyfluoroalkyl Substances Study – 2021 Preliminary Report (the "Preliminary Report"), summarizing information and data collected by the U.S. Environmental Protection Agency's ("EPA") Office of Water concerning industrial discharges of PFAS from five industrial point source categories: (1) organic chemicals, plastics and synthetic fibers manufacturing, (2) metal finishing, (3) pulp, paper, and paperboard manufacturing, (4) textile mills, and (5) commercial airports. The Preliminary Report provided the main sources of PFAS from each industry, the types of PFAS present in the discharges, and whether the facilities in the identified industries have monitoring requirements, effluent limitations, or pre-treatment standards for PFAS.

The EPA released its Strategic Roadmap for PFAS in October 2021. The EPA's roadmap seeks to regulate the entire lifecycle of PFAS substances from their production processes to all subsequent offspring of production. The PFAS Roadmap is based on the three objectives of "research, restrict, and remediate."

The EPA's Strategic Roadmap describes a number of ongoing and future agency actions to address PFAS. Actions include a new national testing strategy to accelerate research and regulatory development, a proposal to designate PFAS as a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA," also known as the Superfund statute), and actions to broaden and accelerate the cleanup of PFAS.

On January 10, 2022, the EPA submitted a proposed rule for review to the White House Office of Management and Budget (the "OMB") to designate PFOA and PFOS as hazardous substances under CERCLA. Once OMB review is complete, the EPA will be able to propose the rule for public comment, which could be seen sometime in April 2022.

Such designations under CERCLA would require facilities across the country to report on PFOA and PFOS releases that meet or exceed the reportable quantity assigned to these substances. The hazardous substance designations would also enhance the ability of federal, Tribal, state, and local authorities to obtain information regarding the location and extent of releases. The EPA or other agencies could also seek cost recovery or contributions for costs incurred for the cleanup. This step could also lead to such actions as EPA revisiting former cleanup sites that may still contain PFAS, and would require testing for designated PFAS as part of any future five-year reviews. This likely listing under CERCLA would represent a significant risk to almost any company that has been involved as a potentially responsible party at a CERLCA site in the past. The consequences of EPA declaring PFAS as hazardous substances could also trigger new rounds of litigation on coverage, apportionment, and cost recovery.

3. Implemented State Regulation of PFAS

Several states have implemented regulations for limits of PFAS in drinking water. Until federal regulation occurs, the regulatory landscape for PFAS in drinking water will vary widely by the type of PFAS regulated and the amount permitted. For example, one of the smallest allowable concentrations is currently 5.1 ppt (California, regulating PFOA only), and one of the largest values is currently 400,000 ppt (Michigan, regulating PFHxA only).

Aside from drinking water regulations, California has also enacted legislation regulating uses for PFAS. In November 2017, California's Office of Environmental Health Hazardous Assessment listed PFOA and PFOS as substances that have a recognized reproductive toxicity by the state of California under its Safe Drinking Water and Toxic Enforcement Act of 1986 ("Proposition 65" or "Prop 65"). More recently, California recently enacted two laws restricting PFAS in household products. The first law, the California Safer Food Packaging and Cookware Act of 2021, prohibits the use of PFAS above certain levels in paper-based food packaging, and requires disclosure of certain chemicals in cookware. The second law, the Product Safety – Juvenile Products: Chemicals: PFAS Substances, prohibits the use of PFAS in certain child products, like bassinets, booster seats and crib mattresses.

B. Regulatory Activity in the European Union

PFAS regulation is not restricted to the United States. A regulatory process to potentially restrict the use of PFAS in non-essential applications by 2025 has now been formally initiated in the European Union. On February 23, 2022, the European Chemicals Agency proposed to ban the use of PFAS in firefighting foams in Europe. A proposal to restrict PFAS under the European regulation for Registration, Evaluation, Authorization and Restriction of Chemicals ("REACH"), jointly prepared by the national REACH authorities of Germany, the Netherlands, Norway,

Sweden and Denmark, is anticipated by July 2022.[11] In addition, recently, Chemours has been challenging the inclusion of GenX as a Substance of Very High Concern under REACH.

IV. INSURANCE COVERAGE ISSUES PERTAINING TO PFAS CLAIMS

PFAS claims will present a host of potential issues pertaining to commercial general liability ("CGL") policies and Bermuda forms. Over the past 50 years, the extent to which pollution liability is or is not covered by liability policies has been one of the foremost sources of coverage litigation. The rapid expansion of PFAS lawsuits over the last decade has brought many of these issues back to the forefront of coverage analysis, with the unique nature of PFAS-related losses adding layers of complexity upon many of the environmental liability issues litigated over the past several decades. We note several key insurance coverage issues below.

A. The Application of the Pollution Exclusion May Hinge on Which Version of the Exclusion is at Issue, and What State's Law Applies

In 1973, the "qualified" pollution exclusion became a standard exclusion in CGL policies. Generally, the "qualified" pollution exclusion barred coverage for pollution caused by the discharge of pollutants, but contained an exception "qualifying" that the exclusion did not apply to the sudden and accidental release of pollutions.

Lengthy and costly coverage litigation ensued over what the terms "sudden" and "accidental" meant, and whether they were ambiguous. This led to the creation of the "absolute" pollution exclusion in 1986, which expanded the breadth of the exclusion and eliminated the phrase "sudden and accidental" from the exclusion altogether. In the 2000s, Bermuda forms were developed partly in response to the eroding or absent coverage for environmental losses that occurred throughout the 20th century. While the XL004 form contains elements of the "absolute" pollution exclusion, it also contains exceptions that arguably reinstate coverage for certain pollution losses.

In the context of PFAS claims, the precise language of the exclusion at issue could make all the difference. While one court has determined that the "absolute" pollution exclusion bars coverage for PFAS-related pollution, the rulings as to the "qualified" pollution exclusion have been more of a mixed bag. These cases and issues are discussed in greater detail below.

(a) New York's Appellate Division Holds That the Absolute *and* Qualified Pollution Exclusions Bar Coverage for PFAS Lawsuits

In *Tonoga, Inc. v. New Hampshire Ins. Co.,* No. 532546, 2022 WL 52903 (N.Y. App. Div. Jan. 6, 2022)., a case briefed and argued by Agelo Reppas of BatesCarey on behalf of the insurers, the New York Appellate Division, Third Department unanimously upheld a judgment finding that two insurers owed no coverage in connection with PFAS environmental contamination claims. In *Tonoga*, the underlying case involved PFOA and PFOS contamination that occurred from 1961 to 2013 through the use of the policyholder's coated fabrics manufacturing facility. The policyholder

[11] Chemistry World, *Efforts Underway in Europe to ban PFAS Compounds,* available at: https://www.chemistryworld.com/news/efforts-underway-in-europe-to-ban-pfas-compounds/4014038.article

tendered the case to its various liability insurers on the risk over the five decades in question, including Granite State Insurance Company and New Hampshire Insurance Company, which had issued two policies in the 1970s and 1980s. The insurers denied coverage based upon the qualified and absolute pollution exclusions, respectively, and the *Tonoga* coverage litigation ensured

The Granite State policy contained the "qualified" pollution exclusion that was prevalent throughout the 1970s and early 1980s barring coverage for damages "arising out of the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any water course or body of water," but excepting "sudden and accidental" discharge, dispersal, release or escape of pollutants.

As an initial matter, the court determined that it was "clear" that PFAS substances are pollutants within the meaning of the qualified pollution exclusion. Although the policyholder argued that the exclusion was ambiguous because the policies did not expressly name PFOA or PFOS as irritants, contaminants, or pollutants, the court rejected this argument outright. *Tonoga* was the first case to acknowledge PFAS as a "pollutant" within the terms of a CGL policy.

Next, the court held that the insured failed to meet its burden of showing that the qualified pollution exclusion's "sudden and accidental" discharge exception applied to restore coverage. The court found the PFOA and PFOS discharges neither abrupt nor unintentional/unexpected because the discharges were volitional and long-term, having occurred over many years. The court noted that the gravamen of the underlying actions was the insured's "knowing discharge of PFOA and/or PFOS as part of its routine manufacturing processes." In essence, the court determined that the allegations of years-long manufacturing processes (which are present in most PFAS lawsuits) was dispositive of the "sudden and accidental" exception's inapplicability. Thus, Granite State properly denied coverage under the "absolute" pollution exclusion, and had no duty to defend the policyholder.

The New Hampshire Policy contained a version of the "absolute" pollution exclusion arising out of the actual, alleged or threatened discharge, dispersal, release or escape of pollutants:

> (a) at or from premises owned, rented or occupied by the named insured;
>
> (b) at or from any site or location used by or for the named insured or others for the handling, storage, disposal, processing or treatment of waste;
>
> (c) which are at any time transported, handled, stored, treated, disposed of, or processed as waste by or for the named insured or any person or organization for whom the named insured may be legally responsible; or
>
> (d) at or from any site or location on which the named insured or any contractors or subcontractors working directly or indirectly on behalf of the named insured ... are performing operations

The New Hampshire Policy defined the term "pollutant" as any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste.

The court held that the PFAS substances at issue clearly qualified as "pollutants" as defined by the pollution exclusion in the New Hampshire policy. Then, in assessing the applicability of the exclusionary language itself, the court found that the exclusion unambiguously applied. Thus, New Hampshire properly denied coverage under the "absolute" pollution exclusion and had no duty to defend the policyholder.

The *Tonoga* case was a significant win for the insurance industry. While there is a plethora of New York case law construing pollution exclusions, this is the first published decision finding that PFAS chemicals in particular qualify as irritants, contaminants or pollutants within the meaning of a pollution exclusion, and one in which the court found that both the "qualified" and "absolute" pollution exclusions applied.

(b) A Michigan Federal Court Refused to Apply the Qualified Pollution Exclusion to Long-term Pollution Caused by PFAS

In *Wolverine World Wide, Inc. v. American Insurance Company,* 2021 WL 5548103 (W.D. Mich. June 15, 2021), a group of insurers relied upon the qualified pollution exclusion to deny coverage to Wolverine Worldwide. The underlying cases at issue were part of the litigation involving PFAS contamination emanating Wolverine Worldwide's Rockford, Michigan tannery discussed in Section III.B.a. above, wherein Wolverine Worldwide used 3M's PFAS chemicals in its manufacturing processes to waterproof its Hush Puppies branded shoes. In the ensuing coverage litigation, the insurers argued that the qualified pollution exclusion precluded coverage.

The "qualified" pollution exclusion in *Wolverine* contained an exception for the "sudden and accidental" discharge, dispersal, release or escape of pollutants. However, unlike in *Tonoga*, the *Wolverine* court held that the burden was on the *insurer* to prove that the exception did not apply, and that the underlying record was "silent, uncertain, or unclear as to whether any of the alleged polluting events were sudden or accidental." Thus, the *Wolverine* court held that the "qualified" pollution exclusion did not apply to bar coverage for the duty to defend.

(c) North Carolina Federal Court Refuses to Apply a Hazardous Materials Exclusion to AFFF Exposure Cases

One North Carolina court held that a Hazardous Materials exclusion with similar language to the "absolute" pollution exclusion did not apply to AFFF cases brought by firefighters who were exposed to PFAS through the use of AFFF products. In *Colony Ins. Co. v. Buckeye Fire Equip. Co.*, 2020 WL 6152381 (W.D. N.C. Oct. 20, 2020), the insurer filed a declaratory judgment action seeking a determination that it owed no coverage for the underlying AFFF cases due to a Hazardous Materials Exclusion, which provided as follows:

> This insurance does not apply to:
>
> **Hazardous Materials**
>
> (1) "Bodily injury", "property damage" or "personal and advertising injury" which would not have occurred in whole or in part but for the actual, alleged, or threatened discharge, dispersal, seepage,

migration, release or escape of "hazardous materials" at any time.

* * *

This exclusion applies whether or not such "hazardous material(s)" have any function in your business, operations, premises, site or location.

The term "hazardous materials" was defined to include "pollutants."

In analyzing whether the Hazardous Materials exclusion applied, the court found that North Carolina courts only enforce the "absolute" pollution exclusion in the context of traditional pollution to natural resources. Therefore, the court held that the Hazardous Materials exclusion (like the "absolute" pollution exclusion) should apply only in the context of traditional environmental pollution, and that it does not apply to preclude the injury claims alleged by the firefighters. Therefore, the insurer had a duty to defend the underlying AFFF lawsuits.

(d) The Applicability of the Bermuda Form Pollution Exclusion May Hinge on the Applicability of the Escape Clause for Product Pollution Liability

The motivation for the creation of the Bermuda form was in part to address large scale environmental and toxic tort exposures resulting from policyholders' decades old operations that may or may not be covered by decades old policies. To that end, the XL004 form contains Exclusion K., a pollution exclusion that bars coverage for a broad swath of damages, but also contains several highly detailed exceptions that could leave coverage in place for certain pollution-related risks that may not be covered by traditional CGL policies. The initial wording of Exclusion K, bars coverage for:

(1) (a) liability for Personal Injury, Property Damage or Advertising Liability arising out of the Discharge of Pollutants into or upon land or real estate, the atmosphere, or any watercourse or body of water whether above or below ground or otherwise into the environment; or

(b) liability, loss, cost or expense of any Insured or others arising out of any direction or request, whether governmental or otherwise, that any Insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize Pollutants.

The exclusion goes on to state that it applies regardless of whether the discharge of pollutants:

(i) results from the Insured's activities or the activities of any other person or entity
(ii) is sudden, gradual, accidental, unexpected or unintended; or
(iii) arises out of or relates to industrial operations or the Waste or by-products thereof.

In the context of PFAS claims, where the policyholder is the alleged polluter, insurers have strong arguments that the exclusion should apply. Unlike many of the exclusion appearing in CGL policies, the XL004 form's pollution exclusion applies regardless of whether the pollution

is sudden or accidental or whether the pollution relates to industrial operations (*i.e.*, traditional environmental pollution). Therefore, where the insured itself caused the PFAS contamination to occur, Exclusion K. should apply to bar coverage for most resulting liability.

However, chemical manufacturers such as DuPont, Chemours, 3M, and Solvay are frequently named in lawsuits where the alleged pollution was caused by product manufacturers incorporating PFAS substances into other products. In these cases, the question of whether the pollution exclusion should bar coverage for the chemical manufacturer is less clear cut.

While the initial wording of Exclusion K. is sufficiently broad to bar coverage for virtually any type of pollution loss, the exclusion contains several exceptions to applicability. Most notably in the context of PFAS claims, the exclusion does not to "Product Pollution Liability," which is defined as follows:

> [L]liability or alleged liability for Personal Injury or Property Damage arising out of the end-use of the Insured's Products, if such use occurs after possession of such goods or products has been relinquished by others to the Insured, or by others trading under its name and if such use occurs away from premises owned, rented or controlled by the Insured…

The Product Pollution Liability exception contains two key elements: (1) whether the injury or damage was caused by the "end-use" of the insured's products, and (2) whether the injury or damage occurred away from the insured's premises after possession was relinquished. While the question of whether the injury occurred away from the insured's premises and after possession was relinquished is a fact question that can be easily resolved, the question of what constitutes the "end-use" of a PFAS chemical is subject to debate.

Like many XL004 issues, there is no New York case law addressing what "end use" means in the context of the Product Pollution Liability Exception. Given that chemical manufacturers have already entered into multi-million-dollar settlements in cases that potentially implicate the Product Pollution Liability exception, it is likely that this issue will be the subject of several arbitrations in the coming years. On balance, the argument that a PFAS substance reaches its "end use" upon delivery to a product manufacturer seems misguided, as delivery does not constitute "use" of the chemicals whatsoever. It may be more likely that "end use" occurs when the chemicals have actually been put to use and incorporated into a product manufacturers' goods.

B. Expected/Intended Injury Exclusions May Be Challenging to Enforce

With few exceptions, every lawsuit arising out of PFAS contamination will include allegations that the product manufacturer and/or chemical manufacturer had knowledge of the injurious effects of PFAS, but chose to ignore or conceal that knowledge from workers, area residents, and governmental entities. These allegations give rise to a question of whether the injuries at issue were an accidental "occurrence" such that coverage would attach under the standard CGL insuring agreement language, or whether those policies' "expected or intended injury" exclusions may bar coverage.

While there are no U.S. cases directly discussing fortuity issues in the context of a PFAS claim, the "occurrence" and expected or intended injury" defenses are challenging to prove without evidence that the policyholder had some specific knowledge or intent of the results of its actions.

The U.S. Court of Appeals for the Second Circuit illustrates the challenges inherent in these defenses. In *City of Johnstown, NY v. Bankers Standard Ins. Co.,* 877 F.2d 1146 (2d Cir. 1998) (New York law), the court held that:

> It is not enough that an insured was warned that damages might ensue from its actions, or that, once warned, an insured decided to take a calculated risk and proceed as before. Recovery will be barred ***only if*** the insured intended the damages, or it can be said that the damages were, in a broader sense, "intended" by the insured because the insured knew that damages would flow directly and immediately form the intentional act.

(emphasis added).

In the context of PFAS litigation, it remains to be seen whether allegations that manufacturers such as 3M and DuPont knew of the dangers of PFAS and proceeded with their manufacturing will be sufficient to trigger an "expected or intended" injury defense.

The "expected or intended" clauses found in the XL004 presents slightly different problems for policyholders in the context of PFAS litigation. Broadly, the XL004 does not apply to injury or damage which is "expected or intended" by any insured. Article III.L sets forth the definition of "expected or intended" to include:

- Actual or alleged injury or damage that is expected or intended by the insured (L(1)(a)).
- With respect to Integrated Occurrences, the insured's historical experience of the level or rate of such injuries or damages equates to an expectation or intent. (L(1)(b)
- With respect to Integrated Occurrences, the insured expects or intends a level or rate of actual or alleged injury or damage. (L(1)(c).

The coverage defenses provided by (L)(1) above provide worthwhile bases for reservations of rights given the extensive allegations of knowledge and fraud in the chemical manufacturing sector related to their expected PFAS liabilities. For example, in 2019, Chemours shareholders sued DuPont due to alleged fraudulent misrepresentations of the scope of DuPont's PFAS liabilities that were ultimately transferred to Chemours. Although DuPont estimated to Chemours that there was only a "remote" chance that its liabilities would exceed $500 million, Chemours shareholders alleged that the company's actual exposure could exceed $6 billion. These allegations raise significant questions as to whether manufacturers expected a "level or rate" of PFAS claims in line with the extensive and growing current landscape.

C. Do PFAS Abatement or Monitoring Costs Constitute Covered "Damages"?

Most general liability policies limit insurance to those sums that the policyholder is required to pay "as damages." This "as damages" requirement is often interpreted to mean that

covered remedies are those paid to compensate an individual for having suffered injury, or to restore property back to its original condition. Such payments are considered "damages" for the harm suffered during a particular policy period. *Whole Enchilada Inc. v. Travelers Prop. & Cas. Co.*, 581 F. Supp.2d 677, 704 (W.D. Pa. Sept. 29, 2008)(Pennsylvania law)("damages," which was undefined in the policy, means "compensation for a loss or injury" and not "potential harm").

On the other hand, settlement payments that are made to help fund the prevention of future or continuing pollution, or to make programmatic changes in an industry process, are often considered "equitable" payments that are not made "as damages." *EnergyNorth Natural Gas v. Century Indem. Co.*, 2005 WL 1868711 (D. N. Hampshire Aug. 3, 2005).

Not only might the difference between "compensatory" and "equitable" payments result in different coverage rulings, but so too might there exist a significant difference between sums paid to compensate bodily injuries that exist, and sums paid to establish medical monitoring to determine whether bodily injuries exist. *See, HPF, LLC v. General Star Indemnity Co.*, 788 N.E.2d 753 (Ill. App. Ct. 2003)(the plaintiff did not allege "bodily injury" or even the potential for "bodily injury" in his complaint, and thus his request for medical monitoring, by itself, did not trigger the insurer's duty to defend) as compared to *Baughman v. U.S. Liability Ins. Co.*, 662 F.Supp.2d. 386 (D.N.J. 2009)(medical monitoring constituted "damages" and exposure to mercury at a daycare center constituted "bodily injury" giving rise to the duties to defend and indemnify).

D. The Long-Tail Nature of Various PFAS Suits Presents Issues of Trigger of Coverage That May Not Be Easily Resolved

As most PFAS-related lawsuits involve injuries and damage that developed over a period of years if not decades, the insurance industry will once again be tasked with sorting through the significant issues associated with long-tail environmental damage related to trigger, allocation, and erosion. The outcome of these issues will ultimately be guided by the at-issue policy language as well as law of the state applicable to that policy.

As to trigger, there are four primary trigger theories: (1) exposure – triggers coverage in effect during the period of exposure, beginning from a claimant's first exposure to PFAS or first release of PFAS from a manufacturing facility; (2) injury-in-fact – triggers coverage during the period that injury or damage from PFAS exposure actually occurs; (3) manifestation – triggers coverage only when damage caused by PFAS exposure is actually manifested or discovered; and (4) continuous trigger – triggers coverage under all policies in effect from first exposure to PFAS substances through manifestation of PFAS-related injury or damage.

In the only ruling addressing trigger of coverage for PFAS cases to date, a court held that a "continuous injury" condition did not apply due to the expansive and ambiguous nature of the underlying pleadings. In *Crum & Forster Specialty Ins. Co. v. Chemicals, Inc.*, CV H-20-3493, 2021 WL 3423111, at *1 (S.D. Tex. Aug. 5, 2021), a Texas federal court analyzed whether AFFF lawsuits triggered coverage under a policy containing a "Continuous or Progressive Damage or Injury" condition stating that "if the date cannot be determined upon which such 'bodily injury' ... first occurred[,] ... then, ... such 'bodily injury'... will be deemed to have occurred or existed, ... before the 'policy period'." The insurer argued that, because the underlying AFFF lawsuits do not specify when the injuries resulting from AFFF exposure occurred, the "Continuous or Progressive

Damage or Injury" condition determines that the injuries are deemed to have occurred before the policy period, and therefore not covered.

The *Crum & Forster* court rejected the insurers' argument and held, for the purposes of the duty to defend, that the underlying AFFF lawsuits were potentially covered because the underlying firefighter plaintiffs allege that they were working and suffering injuries over a period of time that potentially included the at-issue policy periods. Therefore, the court found that the insured must be given an opportunity to later demonstrate that the exposures and injuries potentially first occurred during the policy period, therefore falling within the scope of coverage.

Given the fact that many of the alleged underlying exposures and injuries occurred over a period of decades, many of the underlying class actions and mass actions will trigger multiple policies over a period of years regardless of which trigger theory is applied. The varying pollution exclusion language discussed above, as well as erosion of policies that were issued decades ago will provide challenges for insurers trying to define their potential PFAS exposures.

V. CONCLUSION

Because PFAS are found in all areas of the United States and overseas, and because litigants and regulators are focused on the physical and environmental effects of PFAS, insurers and companies should continue to monitor the litigation and approaching regulations to understand the nature and exposure associated with PFAS liability.

BATESCAREY LLP

Appendix A: PFAS Litigation Defendant Listing

Named Defendant	Type	AFFF MDL	Demonstrative Cases
3M Company	Chemical Manufacturer	Yes	State of Minnesota; Wolverine Worldwide
AAA Emergency Supply Co., Inc.	AFFF Distributor	Yes	AFFF MDL
AFCO Avports, LLC	AFFF Purchaser	Yes	AFFF MDL
AGC Inc.	Chemical Manufacturer	Yes	AFFF MDL
AGC Chemicals Americas, Inc.	Chemical Manufacturer	Yes	AFFF MDL
Aladdin Manufacturing Corporation	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
AllStar Fire Equipment, Inc.	AFFF Distributor	Yes	AFFF MDL
Amerex Corporation	AFFF Manufacturer	Yes	AFFF MDL
Americhem, Inc.	Chemical Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Angus Fire Armour Corporation	AFFF Manufacturer	Yes	AFFF MDL
Angus International Safety Group Ltd.	AFFF Manufacturer	Yes	AFFF MDL
Ansul Company	AFFF Manufacturer	Yes	AFFF MDL
Archroma Management, LLC	Chemical Manufacturer	Yes	AFFF MDL
Arkema, Inc.	Chemical Manufacturer	Yes	West Deptford, NJ Litigation
Arkema France SA	Chemical Manufacturer	Yes	West Deptford, NJ Litigation
ArrowStar, LLC	Chemical Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Asahi Kasei Plastics North America	Chemical Manufacturer	No	Hardwick v. 3M
Atlantic Aviation FBO, Inc.	AFFF Purchaser	Yes	AFFF MDL

BASF Corporation	Chemical Manufacturer	Yes	AFFF MDL
Buckeye Fire Equipment Company	AFFF Manufacturer	Yes	AFFF MDL
The Burt's Bees Products Company	Cosmetics Manufacturer	No	Gruen v. The Clorox Company
Carrier Global Corporation	AFFF Manufacturer	Yes	AFFF MDL
Central Sprinkler, LLC	AFFF Manufacturer	Yes	AFFF MDL
ChemDesign Products, Inc.	AFFF Manufacturer	Yes	AFFF MDL
Chemguard Inc.	AFFF Manufacturer	Yes	AFFF MDL
Chemicals, Inc.	Chemical Manufacturer	Yes	AFFF MDL
The Chemours Company	Chemical Manufacturer	Yes	Fayetteville Works; Chambers Works
Chemours Company FC LLC	Chemical Manufacturer	Yes	Fayetteville Works; Chambers Works
Chem-Tech Finishers, Inc.	Carpet Cleaner	No	Johnson v. 3M; Dalton, GA Litigation
Chubb Fire Ltd.	AFFF Manufacturer	Yes	AFFF MDL
Ciba, Inc.	Chemical Manufacturer	Yes	AFFF MDL
Clariant Corp.	Chemical Manufacturer	Yes	AFFF MDL
The Clorox Company	Cosmetics Manufacturer	No	Gruen v. The Clorox Company
Color Express, Inc.	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Colombia Recycling Corp.	Waste Management	No	Johnson v. 3M; Dalton, GA Litigation
Corning, Inc.	Glass Manufacturer	No	Maine Paper Mill Lawsuits
Corteva Inc.	Chemical Manufacturer	Yes	AFFF MDL

Coty, Inc.	Cosmetics Manufacturer	No	Toxin Free USA v. Cover Girl Cosmetics
Cover Girl Cosmetics	Cosmetics Manufacturer	No	Toxin Free USA v. Cover Girl Cosmetics
Cycle Tex, Inc.	Waste Management	No	Johnson v. 3M; Dalton, GA Litigation
Daikin America, Inc.	Chemical Manufacturer	Yes	Hardwick v. 3M; Alabama Water Authority Cases
Daikin Industries, Ltd.	Chemical Manufacturer	Yes	Hardwick v. 3M; Alabama Water Authority Cases
Deepwater Chemicals, Inc.	Chemical Manufacturer	Yes	AFFF MDL
The Dixie Group, Inc.	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Dorset Industries, Inc.	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Du Pont De Nemours, Inc.	Chemical Manufacturer	Yes	C8 MDL; Fayetteville Works; Chambers Works
Dynax Corporation	AFFF Manufacturer	Yes	AFFF MDL
Dyneon LLC	Chemical Manufacturer	Yes	AFFF MDL
DyStar, L.P.	Chemical Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
El Du Pont De Nemours and Company	Chemical Manufacturer	Yes	C8 MDL; Fayetteville Works; Chambers Works
Ele Corporation	Chemical Manufacturer	Yes	AFFF MDL
Engineered Floors, LLC	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
E-One, Inc.	AFFF Distributor	Yes	AFFF MDL
Fibro Chem, LLC	Chemical Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Federal Express Corporation	AFFF Purchaser	Yes	AFFF MDL
Fire Products GP Holding, LLC	AFFF Manufacturer	Yes	AFFF MDL

Georgia Pacific LLC	Paper Manufacturer	No	Dykehouse v. Georgia Pacific
Globe Manufacturing Co.	AFFF Manufacturer	Yes	AFFF MDL
Honeywell International Inc.	Chemical Manufacturer	Yes	Hoosick Falls Litigation
Huhtamaki Oyj	Paper Manufacturer	No	Maine Paper Mill Litigation
IMACC Corporation	Waste Management	No	Johnson v. 3M; Dalton, GA Litigation
Indian Summer Carpet Mills, Inc.	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
International Paper Company	Paper Manufacturer	No	Maine Paper Mill Litigation
INV Performance Surfaces, LLC	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
JB NSD, Inc.	Waste Management	No	Johnson v. 3M; Dalton, GA Litigation
Johnson Controls International PLC	AFFF Manufacturer	Yes	AFFF MDL
J&J Rug Company, Inc.	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Kidde-Fenwal, Inc.	AFFF Manufacturer	Yes	AFFF MDL
Kidde Fire Fighting, Inc.	AFFF Manufacturer	Yes	AFFF MDL
Kidde PLC, Inc.	AFFF Manufacturer	Yes	AFFF MDL
Kimberly-Clark Corporation	Paper Manufacturer	No	Maine Paper Mill Litigation
Lexmark Carpet Mills, Inc.	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
L.N. Curtis & Sons	AFFF Distributor	Yes	AFFF MDL
L'Oreal U.S.A., Inc.	Cosmetics Manufacturer	No	Hicks v. L'Oreal
Leo M. Ellebracht Company	AFFF Distributor	Yes	AFFF MDL

Lion Group, Inc.	AFFF Manufacturer	Yes	AFFF MDL
Mallory Safety & Supply LLC	AFFF Manufacturer	Yes	AFFF MDL
McDonald's Corporation	Fast Food Restaurant	No	Clark v. McDonald's
MFG Chemical, Inc.	Chemical Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Milliken & Company	Chemical Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Mine Safety Appliance Co.	AFFF Manufacturer	Yes	AFFF MDL
Mohawk Carpet, LLC	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Mohawk Industries, Inc.	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Municipal Emergency Services, Inc.	AFFF Distributor	Yes	AFFF MDL
Narchem Corporation	Chemical Manufacturer	Yes	AFFF MDL
National Express, LLC	AFFF Purchaser	Yes	AFFF MDL
National Foam Inc.	AFFF Manufacturer	Yes	AFFF MDL
Nation Ford Chemical Company	Chemical Manufacturer	Yes	AFFF MDL
Oriental Weavers USA LLC	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
PBI Performance Products, Inc.	AFFF Manufacturer	Yes	AFFF MDL
Perimeter Solutions LP	AFFF Manufacturer	Yes	AFFF MDL
Pixelle Specialty Solutions	Paper Manufacturer	No	Maine Paper Mill Litigation
Polyventine LLC	Chemical Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
PSG-Functional Materials	Chemical Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation

Raytheon Technologies Corporation	AFFF Manufacturer	Yes	AFFF MDL
Saint-Gobain Performance Plastics Corp.	Coated Fabrics Manufacturer	No	Hoosick Falls Litigation
Sappi North America, Inc.	Paper Manufacturer	No	Maine Paper Mill Litigation
S.D. Warren Company	Paper Manufacturer	No	Maine Paper Mill Litigation
Shaw Industries, Inc.	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Shaw Industries Group, Inc.	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Shiseido Americas Corporation	Cosmetics Manufacturer	No	Onaka v. Shiseido Americas Corp.
Solvay Specialty Polymers USA LLC	Chemical Manufacturer	Yes	West Deptford, NJ Litigation
StedFast, USA Inc.	AFFF Manufacturer	Yes	AFFF MDL
Taconic Plastics, Inc.	Coated Fabrics Manufacturer	No	Petersburgh, NY Litigation
Tarkett USA, Inc.	Carpet Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Ten Cate Protective Fabrics, USA	PPE Manufacturer	Yes	AFFF MDL
Textile Rubber and Chemical Company	Chemical Manufacturer	No	Johnson v. 3M; Dalton, GA Litigation
Tonoga, Inc.	Coated Fabrics Manufacturer	No	Petersburgh, NY Litigation
Tyco Fire Products LP	AFFF Manufacturer	Yes	AFFF MDL
United Technologies Corporation	AFFF Manufacturer	Yes	AFFF MDL
United States of America	Purchaser	Yes	AFFF MDL
United States Department of the Air Force	Purchaser	Yes	AFFF MDL
United States Department of the Army	Purchaser	Yes	AFFF MDL

United States Department of Defense	Purchaser	Yes	AFFF MDL
UPM-Kymmene	Paper Manufacturer	No	Maine Paper Mill Litigation
UTC Fire & Security Americas Corporation, Inc.	AFFF Manufacturer	Yes	AFFF MDL
Verso Corp.	Paper Manufacturer	No	Maine Paper Mill Litigation
Williams Fire & Hazard Control, Inc.	AFFF Distributor	Yes	AFFF MDL
W.L. Gore & Associates	AFFF Manufacturer	Yes	AFFF MDL
Wolverine World Wide Inc.	Shoe Manufacturer	No	Wolverine Worldwide Litigation

BATESCAREY LLP

Appendix B: PFAS LITIGATION SETTLEMENTS

I. Aqueous Film Forming Foam (AFFF) Cases

Case	Settlement Date	Jurisdiction	Settlement Party	Summary	Amount
Campbell, et al. v. Tyco Fire Products LP., et al.	January 7, 2021	District of South Carolina (MDL)	Tyco, Chemguard and ChemDesign	Settled claims on behalf of roughly 300 homeowners (1,100 people) related to PFAS in private drinking water wells, property damage and individual disease claims due to the use of AFFF in Peshtigo and Marinette, WI.[1]	**$17.5 M**
City of Bemidji v. 3M Company	March 2021	Unfiled (MN)	3M	3M resolved for $12.5 million an unfiled claim brought by the City of Bemidji, Minnesota, related to the use of AFFF at the Bemidji Regional Airport, which allegedly damaged the City's groundwater wells through the presence of PFAS.[2]	**$12.5 M**

[1] Perrin Conferences Impact of PFAS on Environmental Litigation Conference: Current Litigation and MDL Status Update. January 13, 2022. PDF. PowerPoint Presentation. *See also* Kaeding, Danielle. Peshtigo Residents Reach $17.M Class Action Settlement with Tyco Over PFAS Contamination. Wisconsin Public Radio. January 7, 2021. https://www.wpr.org/peshtigo-residents-reach-17-5m-class-action-settlement-tyco-over-pfas-contamination

[2] Marohn, Kirsti. Bemidji settles with 3M over water treatment for "forever chemicals." MPR News. April 5, 2021. https://www.mprnews.org/story/2021/04/04/bemidji-settles-with-3m-over-water-treatment-for-forever-chemicals

PFAS LITIGATION SETTLEMENTS

II. Environmental Pollution Cases

Case	Settlement Date	Jurisdiction	Settlement Party	Summary	Amount
Leach, et al. v. E.I. du Pont de Nemours and Company, et al.	November 2004	Wood County, West Virginia	DuPont	In a class action where DuPont allegedly contaminated the local water supply with C8 (PFOA), plaintiffs agreed to a $342 million settlement wherein DuPont would fund an independent science panel to study the connection between PFOA and human disease, in addition to a comprehensive medical monitoring program, attorney's fees, and costs. Significantly, this settlement allowed for class members to file subsequent individual personal injury claims against DuPont if the science panel identified a link between PFOA and human diseases. The science panel found six diseases with a probable link to PFOA. Only class members with diagnosed "probable link" diseases were able to then file individual actions against DuPont.[3]	**$342 M**
In re E.I. du Pont de Nemours and Company C-8 Personal Injury Litigation	February 2017; January 2021	Southern District of Ohio (MDL)	DuPont and Chemours	DuPont and Chemours reached a $670.7 million global settlement with the 3,500-plus then pending personal injury cases filed after the *Leach* settlement alleging injuries from exposure to PFOA.[4] In January 2021, the DuPont entities agreed to pay an additional $83 million sum to resolve additional "personal injury" cases that had been filed after the January 2021, settlement.	**$753.7 M**

[3] *In re: E.I. du Pont de Nemours and Company C-8 Personal Injury Litigation*, *Leach Settlement Agreement* ¶¶ 8-12.

[4] DuPont.com. DuPont Reaches Global Settlement of Multi-District PFOA Litigation. February 13, 2017. Press Release. https://www.dupont.com/news/dupont-reaches-global-settlement-of-multi-district-pfoa-litigation.html

BATESCAREY LLP

PFAS LITIGATION SETTLEMENTS

II. Environmental Pollution Cases

Case	Settlement Date	Jurisdiction	Settlement Party	Summary	Amount
State of Minnesota, by its Attorney General Lori Swanson v. 3M Company	February 20, 2018	Hennepin County, Minnesota	3M	The State of Minnesota sued 3M in 2010 alleging that the company's production of PFAS chemicals damaged drinking water and natural resources in the Twin Cities Metropolitan Area. After legal and other expenses are paid, about $720M will be invested in drinking water and natural resource projects in the Twin Cities metropolitan region.[5]	**$850 M**
City of Lake Elmo v. 3M Company	May 2019	District of Minnesota	3M	In July 2016, the City of Lake Elmo, Minnesota sued 3M alleging violation of CERCLA and seeking declaratory relief and damages resulting from alleged presence of PFCs in drinking water supplies. In May 2019, 3M settled the case for $2.7M, plus a transfer of 180 acres of farmland to the city, valued at an additional $1.8M.[6]	**$4.5 M**
Michigan Department of Environmental Quality v. Wolverine World Wide, Inc.	February 19, 2020	Western District of Michigan	Wolverine Worldwide	The State of Michigan, Plainfield and Algoma townships, and Wolverine agreed to a settlement where the shoemaker to pay the cost of extending municipal water service to nearly 1,000 homeowners whose private drinking wells were contaminated by PFAS, along with all hookup and connection fees.[7]	**$69.5 M**

[5] Minnesota Pollution Control Agency, Department of Natural Resources. Minnesota 3M PFAS Settlement. https://3msettlement.state.mn.us/. *See also* Bjorhus, Jennifer. State finalizes payouts from Minnesota's $850 million "forever chemicals" settlement with 3M. Star Tribune. August 18, 2021. https://www.startribune.com/state-finalizes-payouts-from-minnesota-s-850-million-forever-chemicals-settlement-with-3m/600089057/

[6] Marohn, Kirsti and Sepic, Matt. 3M, Lake Elmo settle for $2.7M, land transfer in drinking water lawsuit. MPR News. May 22, 2019. https://www.mprnews.org/story/2019/05/21/3m-lake-elmo-reach-tentative-settlement-in-pfas-drinking-water-lawsuit

[7] Plainfield Charter Township. Wolverine Worldwide PFAS Settlement. Plainfield Charter Township Information. 2021.

BATESCAREY LLP

PFAS LITIGATION SETTLEMENTS

II. Environmental Pollution Cases

Case	Settlement Date	Jurisdiction	Settlement Party	Summary	Amount
Michigan Department of Environmental Quality v. Wolverine World Wide, Inc.	February 2020	Western District of Michigan	Wolverine Worldwide	In addition to the $69.5M Wolverine agreed to pay as settlement to provide over a multi-year period to extend municipal water to more than 1,000 properties with private wells in Algoma and Plainfield townships (see above), a consent decree among Wolverine, the State of Michigan, and two townships requires Wolverine to spend $43.5M on environmental investigation and remediation costs.[8]	**$43.5 M**
City of West Sacramento, et al., v. R & L Business Management, et al.	March 11, 2021	Eastern District of California	R & L Business Management	R & L owned Capitol Plating for two decades creating plated chrome bumpers. Excess runoff fluids spilled onto the ground outside of the plant, contaminating the site. The settlement calls for PFAS testing, while the extent of the contamination and cleanup costs remain unknown.[9]	**$1.4 M**
Dykehouse et al. v. The 3M Company, et al.	April 26, 2021	Western District of Michigan	3M and Georgia-Pacific	Resolving a 3,000-member class action alleging contamination from a paper mill, owned by Georgia Pacific, claiming Georgia Pacific and its predecessors dumped PFAS-containing waste beginning in the 1950s.[10]	**$11.9 M**

https://www.plainfieldmi.org/information_about/pfas_settlement/index.php. *See also* Wolverine agrees to $69.5 million PFAS settlement with Plainfield, Algoma townships. MiBiz. December 10, 2019. https://mibiz.com/sections/economic-development/wolverine-agrees-to-69-5-million-pfas-settlement-with-plainfield-algoma-townships-2

[8] Eggert, David. Wolverine Worldwide will pay $113M over PFAS-polluted drinking water. Great Lakes Now. Associated Press. February 26, 2020. https://www.greatlakesnow.org/2020/02/ap-wolverine-worldwide-3m-113m-pfas-drinking-water/

[9] Perrin Conferences Impact of PFAS on Environmental Litigation Conference: Current Litigation and MDL Status Update. January 13, 2022. PDF. PowerPoint Presentation.

[10] Perrin Conferences Impact of PFAS on Environmental Litigation Conference: Current Litigation and MDL Status Update. January 13, 2022. PDF. PowerPoint Presentation. *See also* PFAS Paper Mill Settlement Reflects Growing Trend. The National Law Review. April 28, 2021. https://www.natlawreview.com/article/pfas-paper-mill-settlement-reflects-growing-trend

PFAS LITIGATION SETTLEMENTS

II. Environmental Pollution Cases

Case	Settlement Date	Jurisdiction	Settlement Party	Summary	Amount
Delaware Department of Justice v. DuPont, et al.	July 13, 2021	Delaware	DuPont, Chemours, Corteva	DuPont and Corteva each plan to pay $12.5 million and Chemours will pay $25 million to resolve their responsibilities for past use of PFAS released in the state. The settlement will fund the Natural Resources and Sustainability Trust, which will go toward restoring the environment, sampling and analysis, and other natural resource needs.[11]	**$50 M**
Baker et al. v. Saint-Gobain Performance Plastics Corp., et al.	July 22, 2021	Northern District of New York	3M, Honeywell, Saint-Gobain	PFOA-containing foam used at a Saint-Gobain facility, near Hoosick Falls. NY (formerly owned by Honeywell) caused PFOA to be emitted into the air and groundwater between 1967-2003. Under the settlement agreement for approximately $65.25 million, plaintiffs who say they suffered a drop in their property value starting in December 2015 would be awarded more than $20 million. Nearly $23 million will fund a 10-year program to monitor the health of residents who drank town water from 1996 to 2006. About $8 million will go to class members who claimed a private nuisance. The remainder of the settlement provides for attorneys' fees and costs, the class representatives' service awards, and the costs of notice and administration. The deal does not settle the fourth named defendant, E. I. DuPont de Nemours & Co.[12]	**$65.25 M**

[11] Perrin Conferences Impact of PFAS on Environmental Litigation Conference: Current Litigation and MDL Status Update. January 13, 2022. PDF. PowerPoint Presentation. *See also* Neiburg, Jeff. DuPont, Chemours, Corteva to pay Delaware millions over damage from PFAS of '"forever chemicals." Delaware Online. July 13, 2021. https://www.delawareonline.com/story/news/2021/07/13/dupont-pay-delaware-50-m-settlement-over-use-pfas-forever-chemicals/4751949001/

[12] Perrin Conferences Impact of PFAS on Environmental Litigation Conference: Current Litigation and MDL Status Update. January 13, 2022. PDF. PowerPoint Presentation. *See also* Malo,

PFAS LITIGATION SETTLEMENTS

II. Environmental Pollution Cases

Case	Settlement Date	Jurisdiction	Settlement Party	Summary	Amount
Burdick, et al. v. Tonoga, Inc.	October 1, 2021	Rensselaer County, New York	Taconic Plastics, Inc.	The lawsuit against Taconic Plastics (successor to Tonoga, Inc.) alleged that the company allowed contamination during its production of Teflon-coated fabrics and tapes to seep into groundwater. The settlement establishes three funds: (1) one to pay property owners on the town's public water system; (2) one to pay property owners with private wells that were contaminated; and (3) one to set up a 15-year medical monitoring program for individuals who have a certain level of PFOA detected in their blood.[13]	**$23.5 M**
St. John v. 3M Co. and *Tennessee Riverkeeper Inc. v. 3M Company, et al.*	October 19, 2021	Northern District of Alabama	3M	The *St. John* case was brought in 2002 on behalf of owners of property contaminated with PFAS who alleged that 3M and other defendants' operations contaminated property near 3M's manufacturing facilities in Decatur, AL. In June 2016, Tennessee Riverkeeper Inc. filed suit against 3M alleging violations of the Resource Conservation and Recovery Act, related to the disposal of PFAS in an around 3M's Decatur facilities. In November 2021, the *St. John* and *Tennessee Riverkeeper* matters were jointly mediated and settled in principle for $98 million in addition to other fees. The proposed settlement involves payments of	**$98 M**

Sebastien. 3M, other reach $65 million deal with NY town over PFOA in drinking water. Reuters. July 23, 2021. https://www.reuters.com/legal/litigation/3m-others-reach-65-mln-deal-with-ny-town-over-pfoa-drinking-water-2021-07-22/

[13] Water Quality Products. Taconic Plastics to Pay $23.5 Million to Settle Petersburgh, New York, Water Pollution Case. October 5, 2021. https://www.wqpmag.com/contaminant-removal/taconic-plastics-pay-235-million-settle-petersburgh-new-york-water-pollution

PFAS LITIGATION SETTLEMENTS

II. Environmental Pollution Cases

Case	Settlement Date	Jurisdiction	Settlement Party	Summary	Amount
				$9 million for past costs, $22 million to fund certain landfill upgrades, $7 million for the removal and disposal of sludge from a wastewater treatment facility, $35 million for the construction of a public recreational facility, and $25 million for community development and recreation.[14]	
Lindsey, et al. v. 3M Company, et al. and *West Morgan-East Lawrence Water & Sewer Authority et al. v. 3M Company et al.*	October 26, 2021	Northern District of Alabama	3M, Dyneon LLC, and Daikin America, Inc.	The Lindsey and West Morgan-East cases involved a water provider complaint and class action allegations arising out of the same source of contamination. In October 2015, the West Morgan-East Lawrence Water and Sewer Authority filed suit against 3M and others arising out of PFAS pollution in the Authority's water supply caused by 3M's Decatur facilities. Additionally, a purported class action comprised of owners and possessors of property to which the Authority supplies water sought damages and injunctive relief related to property damage and unascertainable future injuries caused by PFAS contamination. In April 2019, 3M settled the Authority's complaint for $35 million. On October 26, 2021, 3M and the class action plaintiffs filed a motion for preliminary approval of an $12 million settlement.[15]	**$47 M**

[14] DePass, Dee. 3M paying $99M to settle PFAS lawsuits in Alabama. Star Tribune. October 19, 2021. https://www.startribune.com/3m-paying-99m-to-settle-pfas-lawsuits-in-alabama/600108109/?refresh=true

[15] 3M News Center. 3M, Other Parties to Lindsey et al. Reach Agreement Resolving Class Action. October 25, 2021. https://news.3m.com/3M_Lindsey_Information. See also 3M Company. United States Securities and Exchange Commission. Form 10-Q for the quarterly period ended March 31, 2021, (p. 35). https://s24.q4cdn.com/834031268/files/doc_financials/2021/q1/Q1-2021-10-Q.pdf.

PFAS LITIGATION SETTLEMENTS

II. Environmental Pollution Cases

Case	Settlement Date	Jurisdiction	Settlement Party	Summary	Amount
Sullivan et al. v. Saint-Gobain Performance Plastics Corporation	November 10, 2021	District of Vermont	Saint-Gobain	Settlement resolves 2016 suit brought by the State of Vermont on behalf of residents of Bennington, Vermont, alleging contamination of drinking water from discharge of Saint-Gobain production of PFAS coated fabrics between 1969-2002. Saint-Gobain would pay $26.2 million to residents constituting case class members for property damage and devaluation. An additional $6 million would be set aside for a medical monitoring program for any class member who allegedly drank contaminated well water to provide regular medical exams and blood tests to detect any PFAS-related diseases at the earliest possible stage.[16]	**$32.2 M**

[16] Vermont PFAS Settlement for Over $30 Million – Key Takeaways. The National Law Review. November 17, 2021. https://www.natlawreview.com/article/vermont-pfas-settlement-over-30-million-key-takeaways