



## Alerts

### [Commentary] An Updated Primer on PFAS/Forever Chemical Claims: Regulation, Litigation, Large Losses, and Insurance Coverage Issues

November 14, 2024

#### Introduction

Per- and poly-fluoroalkyl substances ("PFAS") represent major exposures to insurers and their policyholders. Thousands of lawsuits are pending nationwide, and numerous large settlements have already been reached. Insurers are facing claims, tenders, and coverage actions from policyholders seeking defense and indemnity for PFAS-related claims. The plaintiffs' bar is focused on PFAS and views these so-called "forever chemicals" as a fertile source of lawsuits and large recoveries.

Though late to the game, federal and state regulators are now locked and loaded on robustly regulating these substances. Whether or not PFAS-related liabilities present losses to the insurance industry that will rival asbestos-related liabilities remains to be seen. Nonetheless, insurers are preparing for numerous claims and large losses.

This commentary provides background on PFAS exposures, highlights recent regulatory developments, explores the litigation of PFAS-related litigation, and discusses some of the many coverage issues that may be presented in PFAS-related coverage litigation.

#### PFAS and Their Widespread Use

##### What are PFAS?

PFAS is an umbrella term encompassing human-made chemicals to make products stain- and grease-resistant and otherwise useful. There are over 12,000 substances identified as PFAS on the U.S. Environmental Protection Agency's ("EPA's") PFAS Datasets. PFAS have been patented since the 1940s and have been used in a wide range of consumer and industrial products since at least the 1950s.

Similar to asbestos, which garnered widespread use due to its incredible insulation and fire-resistant abilities, PFAS quickly gained traction because of its ability to overcome the natural limitations of fire, oil, and water. PFAS have been included in so many products and applied in a vast array of contexts that they are described by many as being ubiquitous—even more so than asbestos. They

#### Attorneys

Gar N. Lauerman

Scott M. Seaman

#### Service Areas

Environmental

Sustainability & ESG



are commonly referred to as "forever chemicals" because they have been thought to not chemically degrade over time.

## The Health and Environmental Impacts of PFAS

Products containing PFAS include food contact surfaces such as cookware, pizza boxes, fast food wrappers, and popcorn bags; stain-resistant and waterproofing treatments on carpets, textiles, furniture, and other products; packaging; additives in polishes, waxes, paints, and cleaning products; protective coatings and sealants; additives to hydraulic fluids and lubricants; aqueous firefighting foams; pesticides; and more.

Scientists from the Centers for Disease Control found four common PFAS in the blood serum of nearly everyone tested. Though more than 95 percent of Americans may have PFAS in their blood, finding a measurable amount of PFAS in the bloodstream does not establish that the presence of PFAS will cause negative health effects. Forty-five percent of the nation's tap water purportedly contains one or more PFAS. PFAS disperse through indoor and outdoor air and often are consumed in food.

Researchers and activists cite three primary reasons for PFAS being potentially harmful to human health and the environment:

1. their chemical structures prevent them from breaking down in the environment and in human bodies;
2. they are especially effective contaminants because they move quickly through the environment, and
3. even extremely low levels of exposure *may* negatively impact human health.

The name "forever chemicals" may actually turn out to be a misnomer. Researchers at Northwestern University recently published a study showing that PFAS can be destroyed using two relatively harmless chemicals: sodium hydroxide or lye. Previously, the only operational way to break down PFAS was to expose the particles to extremely high temperatures—sometimes above 1,800 degrees Fahrenheit—in an incinerator. That energy-intensive process can still release harmful chemicals into the environment.

Studies have shown PFAS may contribute to several adverse health impacts, including higher cholesterol; thyroid disease; ulcerative colitis; breast, testicular, and kidney cancers; changes to the immune system; liver disease; low birth weight; decreased sperm quality; pregnancy-induced hypertension; and delayed mammary gland development.

Industry exposures have been difficult to quantify due to evolving science, the ever-present nature of PFAS compounds, and difficulties in identifying and isolating sources and timing of contamination. However, recent modeling by risk experts estimates \$65 billion in corporate losses from PFAS water contamination and another \$15 billion from bodily injury litigation. PFAS-related litigation plainly represents a significant exposure to insurers and their policyholders as well as reinsurers in view of the ubiquity of the substances, their widespread use, rising claim frequency, large settlements, and additional defendants and legal theories subject to litigation.

## Government Regulation of PFAS

Government regulators appear to have arrived on the PFAS regulation scene late, allowing for extensive exposures. However, they are now focused heavily on PFAS regulation. A Timeline of In 2006, the U.S. Environmental Protection Agency ("EPA") and several PFAS manufacturers entered into a voluntary agreement to study and phase out some PFAS, with subsequent findings suggesting that a common PFAS was carcinogenic. Over the past couple of years, a flurry of regulatory activity has followed.

## Federal Regulation

In June 2021, the EPA issued its first-ever PFAS chemicals reporting proposal, which would require all manufacturers and importers to gather and report the categories and use of PFAS chemicals, volumes manufactured and processed, byproducts, environmental and health effects, worker exposure, and disposal for every year since 2011.



In October 2021, the EPA released its "PFAS Strategic Roadmap," setting timelines by which it plans to take specific actions safeguarding public health, protecting the environment, and holding companies accountable. The "PFAS Strategic Roadmap" embodies a four-year plan to research, restrict, and remediate PFAS use. Over the past six months, the EPA issued significant regulations that will further increase the resources and funds that companies will be required to devote to track and remediate PFAS use.

On October 11, 2023, the EPA issued its final rule regarding PFAS under the Toxic Substances Control Act. [The rule](#) requires every company that manufactured or imported PFAS for a commercial purpose in and after 2011 to report PFAS data to the EPA within 18 months of the rule's November 13, 2023, effective date. The EPA subsequently issued a direct final rule on September 5, 2024, delaying the beginning of the data reporting by eight months to July 11, 2025, and extending the deadline by which most subject entities must report to January 11, 2026.

The reportable data under the rule includes chemical identity and molecular structure, quantities, how the reporting entity and consumers used the chemical, health and environmental impact, disposal methods, and more. The rule covers over 1,462 chemicals. The EPA requires companies to obtain information from the reporting entities' entire organization, not merely management and supervisory personnel.

Compliance may also require inquiries outside the organization. Understandably, many companies, trade associations, and professional advisors are concerned about the costs of reporting and the ability to comply with these onerous reporting requirements for these ubiquitous substances. Many are skeptical about the utility of the reporting requirements and concerned that the reporting scheme will mostly benefit the plaintiffs' bar.

In January 2024, the EPA added seven more PFAS to the chemicals covered by the Toxics Release Inventory, expanding the types of PFAS that are subject to data tracking and collection obligations for some industries. It also finalized a new use rule that prevents companies from starting or resuming the manufacture, processing, or importing of PFAS that they had previously discontinued.

Under the rule, companies that wish to restart manufacturing, production, or importing of 329 PFAS that are designated as inactive on the Toxic Substances Control Act's Chemical Substance Inventory must notify the EPA at least 90 days before starting to process those chemicals for significant new use. The EPA, in turn, will conduct a review that "assesses whether the new use may present an unreasonable risk to the health or the environment" and take appropriate action "as required to protect the health or the environment."

On April 10, 2024, the EPA announced the National Primary Drinking Water Regulation ("NPDWR"). The final rule establishes legally enforceable Maximum Contaminant Levels specific to five types of PFAS ranging from 4 to 10 parts per trillion and sets some PFAS reduction benchmarks that must be achieved over the next three to five years. Although this rule targets public water systems, it is expected to have downstream effects on wastewater treatment facilities and other companies that are permitted to discharge wastewater containing forever chemicals.

The 2021 Infrastructure Law made \$9 billion available to help communities affected by forever chemicals in drinking water and \$12 billion available for general drinking water improvements, but the costs for some municipalities to remediate water systems are expected to dwarf those sums. Utilities are expected to expand their efforts to seek additional money through litigation against PFAS manufacturers and others to fund the remediation obligations. Indeed, only two days after the NPDWR was issued, some municipal corporations and special districts that own and operate public water systems sued several chemical companies, alleging that they knew their products would contaminate water supplies and could cause health issues and citing the NPDWR.

On April 19, 2024, the EPA designated two types of PFAS, perfluorooctanoic acid ("PFOA") and perfluorooctanesulfonic acid ("PFOS"), as "hazardous substances" under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"). This designation could subject current and former owners and operators of facilities contaminated with PFAS, as well as persons who "arranged for [their] disposal" or treatment and certain transporters, to CERCLA's retroactive, strict, and joint-and-several liability regime for cleaning up contaminated sites.



As a result, entities that manufacture and process PFOA or PFOS, as well as those that manufacture products containing PFOA or PFOS, use products containing PFOA or PFOS, and operate waste management or treatment facilities, may be liable for PFAS contamination at Superfund sites. This designation may lead to the listing of new Superfund sites and permit the EPA to reopen settlements for former Superfund sites on which cleanup has been completed due to PFOA and PFOS contamination. Further, this designation now requires facilities working with PFOA and PFOS to report releases of one pound or more within 24 hours.

In conjunction with this designation, the EPA issued its PFAS Enforcement Discretion and Settlement Policy under CERCLA, in which it states that it intends to target only "those parties that have played a significant role in releasing and exacerbating the spread of PFAS in the environment."

The policy statement indicates that "equitable factors" support not seeking liability against the following categories of entities: community water systems and publicly owned treatment works; municipal separate storm sewer systems; publicly owned/operated municipal solid waste landfills; publicly owned airports and local fire departments; and farms where biosolids are applied to the land. These entities reportedly will not be subjected to EPA CERCLA enforcement actions so long as they provide their "full cooperation [to the] EPA, including providing access and information when requested and not interfering with activities that EPA is taking."

## State Regulation

In addition to federal regulations, companies must be cognizant of additional state regulations that, in some cases, maybe more stringent than federal regulations. In recent years, multiple states, including Maine, Massachusetts, New Hampshire, New York, Pennsylvania, Rhode Island, Vermont, Washington, and Wisconsin, have established enforceable drinking water standards for certain PFAS. Delaware and Virginia are considering instituting enforceable standards, and other states have established non-enforceable guidelines. Compliance with both state and federal standards will require careful monitoring of an evolving patchwork of requirements and limits.

## The PFAS Litigation Landscape

Despite the long and widespread use and presence of PFAS, forever chemicals have only recently become one of the most fervent areas for civil litigation. However, the litigation floodgates are now wide open, with thousands of PFAS-related cases pending across the United States and numerous eye-opening settlements already being reached.

More than 6,400 PFAS-related lawsuits were filed in federal court between July 2005 and March 2022, and thousands more have been filed since. These cases have resulted in some eye-opening settlements, such as a 3M settlement of \$850 million, a \$69.5 million settlement involving Wolverine Worldwide, a \$23.5 million settlement involving Taconic Plastics, and a \$17 million settlement involving Johnson Controls. In 2021, Dupont de Nemours Inc., its affiliate Corteva, Inc., and a spin-off entity, Chemours Co. (collectively, "Dupont"), agreed to set aside \$4 billion for future PFAS liabilities. That same year, Dupont settled a multidistrict litigation in Ohio alleging personal injury for \$83 million.

Dupont is also a defendant in ongoing multidistrict litigation over PFAS-laden fire suppressant foams, *In Re: Aqueous Film-Forming Foams Products Liability Litigation*, MDL No. 2:18-mn-2873 (D.S.C.) (the "AFFF Multidistrict Litigation"), which continues to generate large PFAS settlements. In June 2023, Dupont agreed to pay \$1.18 billion to settle a class action involving public water systems serving large portions of the U.S. population. In March 2024, Judge Richard Gergel, the federal judge presiding over the AFFF Multidistrict Litigation, approved an agreement between 3M and public water utilities to settle thousands of lawsuits involving alleged PFAS water contamination that will require 3M to pay more than \$10 billion over 13 years to more than 11,000 public water systems.

The following month, and shortly after the EPA finalized national drinking water standards, Tyco Fire Products LP, another defendant in the AFFF Multidistrict Litigation, reached a \$750 million agreement to settle class action claims by water suppliers across that country alleging that Tyco's firefighting products contaminated drinking water with PFAS. A final fairness hearing on the settlement was held on November 1, 2024. The parties continue to wait for a ruling as of the date of this update.



Most recently, defendant BASF Corp. reached an agreement to settle with a nationwide class of public water systems in the AFFF Multidistrict Litigation for \$316.5 million (\$312.5 million to resolve the PFAS claims, plus \$4 million toward settlement administration costs). Plaintiff utility companies have until October 15, 2024, to opt out of the settlement, and the court is scheduled to evaluate the agreement at the final fairness hearing, which is also scheduled for November 1, 2024.

**To date, most PFAS litigation has fallen into several broad categories:**

1. First, firefighters and others have brought PFAS exposure claims against companies that allegedly manufactured, designed, marketed, and sold aqueous film-forming foam ("AFFF"), a fire suppressant, with the knowledge that it contained PFAS and that exposure can lead to adverse health outcomes.
2. Second, public and private water utilities have sued companies that utilize PFAS, including AFFF manufacturers, alleging that they have contaminated water supplies and seeking damages for purchasing water from alternate sources, investigating and remediating contamination, and monitoring water for PFAS. In 2023 alone, lawsuits accusing companies of polluting drinking water with PFAS led to over \$11 billion in settlements. Considering the EPA's new regulatory tools and a patchwork of developing state regulation, liabilities relating to drinking water are likely to increase substantially.
3. Third, state attorneys generals have sued manufacturers, distributors, and suppliers for contamination in their states' waterways, alleging violations of environmental statutes. These cases present substantial exposure for companies because they allege statewide contamination and not merely contamination of discrete areas. As of April 2024, approximately 30 states have sued manufacturers and others for contaminating water and damaging natural resources.
4. Fourth, individual plaintiffs have sued manufacturers and sellers of products containing PFAS for alleged illness and injury from drinking PFAS-contaminated water.
5. Fifth, plaintiffs have brought actions against companies for violations of environmental statutes based on their use and discharge of PFAS. At the outset of this era of PFAS litigation, cases focused on PFAS manufacturers. Recent cases demonstrate that merely using wrappers and packaging that contain PFAS can subject a company to suit, as demonstrated by class actions filed against McDonald's and Burger King.
6. Finally, plaintiffs have brought consumer protection claims against companies alleging that, despite marketing touting health benefits, their consumer products contain PFAS. For instance, a putative consumer class action was filed in early 2024 in the Southern District of New York in which the lead plaintiff asserted New York General Business Law and unjust enrichment claims on behalf of nationwide and New York putative classes against Health-Ade.

The complaint alleges that Health-Ade falsely markets its kombucha "health" products, including product labels that boast that the products are "organic" and facilitate a "happy gut" when they, in fact, contain PFAS. The lead plaintiff further alleges that her claims are based on "independent laboratory testing" of five different Health-Ade products that demonstrate the presence of PFAS, which poses a health risk. Considering a motion to dismiss in another similar case, the Southern District of New York explained that plaintiffs seeking to establish standing under a price-premium theory of injury must allege facts making it at least plausible that one of them purchased a product that was misbranded (*i.e.*, that contained PFAS).

Plaintiffs may either take the more direct approach of alleging that they tested and detected PFAS in the very products that they purchased or the more indirect approach of alleging that they tested products within the same product line as the items that they purchased. With the latter approach, plaintiffs must " 'meaningfully link' the results of their independent testing 'to Plaintiffs' actual Purchased Products.' "

The court dismissed plaintiffs' claims because they did not make such a link, failing to allege that they tested the products from the same product line as the products that they purchased near in time to plaintiffs' purchases, facts from which the court could extrapolate that their isolated testing should apply broadly to defendants' products, or facts regarding the





frequency of their purchases.

Greenwashing claims have also been asserted. For example, two putative class actions were filed in 2020 in California against both the manufacturer (Kroger) and retailer (Amazon) of compostable dinnerware. Rather than relying on representations about health risks, plaintiffs alleged that they relied on the defendants' marketing statements, namely that their products were disposable and would degrade over time.

The spectrum of defendants has continued to expand. Primary manufacturers of PFAS were initially and continue to be popular targets. The second tier of manufacturers with exposure to PFAS liabilities includes companies that use PFAS chemicals to treat the products they produce. The third tier encompasses companies that have supply chain exposures. These companies often assemble products out of components treated with PFAS but do not use the chemicals. The number and types of defendants will likely continue to expand, potentially implicating sellers of the chemicals, businesses using PFAS, professionals calling for or recommending the use of PFAS or materials containing PFAS, officers and directors, and others.

There is little doubt that manufacturers and others who process, sell, transport, or otherwise utilize PFAS and their insurers will encounter significantly more litigation for years to come. Several manufacturers have stopped producing PFAS-containing products, and several large retailers have decided to stop selling PFAS-containing products to mitigate future liability.

Companies scored an important victory last year that may at least temper the size of litigation they must defend. Specifically, in *Hardwick v. 3M Co. (In re E.I. du Pont de Nemours)*, the U.S. Court of Appeals for the Sixth Circuit vacated a district court order certifying a class of eleven million Ohio residents in a case involving ten defendants. The opening two paragraphs of the opinion tell much of the story:

Seldom is so ambitious a case filed on so slight a basis. The gravamen of Kevin Hardwick's complaint is that his bloodstream contains trace quantities of five chemicals—which are themselves part of a family of thousands of chemicals whose usage is nearly ubiquitous in modern life. Hardwick does not know what companies manufactured the particular chemicals in his bloodstream; nor does he know, or indeed have much idea, whether those chemicals might someday make him sick; nor, as a result of those chemicals, does he have any sickness or symptoms now.

Yet, of the thousands of companies that have manufactured chemicals of this general type over the past half-century, Hardwick has chosen to sue the ten defendants present here. His allegations regarding those defendants are both collective—rarely does he allege an action by a specific defendant—and conclusory. Yet Hardwick sought to represent a class comprising nearly every person "residing in the United States"—a class from which, under Civil Rule 23(c), nobody could choose to opt-out. And as relief for his claims, Hardwick asked the district court to appoint a "Science Panel"—whose conclusions, he said, "shall be deemed definitive and binding on all the parties[.]"

The district court, for its part, certified a class comprising every person residing in the State of Ohio—some 11.8 million people. The defendants now appeal that order, arguing (among other things) that Hardwick lacks standing to bring this case. We agree with that argument and remand with instructions to dismiss the case.

The Sixth Circuit determined that the 40-year firefighter failed to establish standing based upon his failure to establish "traceability." The opinion represents an important victory for defendants and highlights the challenges confronting plaintiffs. The decision sets forth a burden for establishing standing that plaintiffs must satisfy to bring PFAS class claims against multiple defendants.

Specifically, they must establish how each defendant manufactured or provided a "plausible pathway" that delivered PFAS to the plaintiff's body. Nonetheless, it will take time to know whether other courts will impose a "traceability" requirement. Plaintiffs' counsel will undoubtedly adjust their pleadings and continue to pound on the doors of PFAS manufacturers, distributors, and other prospective defendants.



## PFAS Coverage Issues

At least sixteen PFAS-related coverage actions have already been instituted in eleven states nationwide. Numerous additional demands for coverage and tenders have been and will be made, and numerous additional coverage actions will be filed. Depending upon the facts, parties, and claims, coverage may be sought under general liability, property, environmental, professional liability, directors' and officers' transactions/representations and warranty, and other policies.

Although insurance coverage may be widely sought, insurance recovery often will not be secured due to numerous available coverage issues and defenses. Parties involved in PFAS-related coverage actions should consider the numerous potential issues presented.

## Forum Selection and Choice of Law

A fairly well-developed body of insurance coverage law exists in the context of toxic and mass tort claims in general and asbestos and environmental claims in particular. From this starting point, insurers and policyholders (who institute most coverage actions) often will have notions about which state's substantive law will be most favorable to their positions and the forums in which they prefer to litigate.

In an unpublished decision, the U.S. Court of Appeals for the Sixth Circuit affirmed the dismissal of an insurer's coverage action involving firefighters' personal injury claims in *Admiral Ins. Co. v. Fire-Dex, LLC*.<sup>[xlv]</sup> Fire-Dex, a manufacturer of clothing worn by firefighters, was sued by the firefighters and their spouses, alleging they had incurred injury from the PFAS in clothing worn while fighting fires. The insurer denied coverage based on the occupational disease exclusion in its policy and sought a declaratory judgment that it had no duty to defend Fire-Dex against the suits.

The district court declined jurisdiction over the declaratory judgment action, concluding acceptance of the case would encroach on state court jurisdiction because Ohio state courts had yet to address the question of insurance liability for PFAS manufacturing. The Sixth Circuit affirmed the district court's abstention, noting that novel issues of state law are best decided by state courts. This decision is contrary to lessons learned from COVID-19 business interruption insurance coverage litigation, where federal courts regularly and properly decided state law coverage issues in the context of a unique pandemic. Some believe the Sixth Circuit decision improvidently denied the insurer an appropriate forum.

In July 2023, Fire-Dex filed a complaint in state court seeking declaratory judgment against its insurer, Admiral. Admiral removed the case to federal court and Fire-Dex sought to remand it back to state court, arguing that *Thibodaux* abstention and *Burford* abstention militated against the court exercising its jurisdiction over the case. *Thibodaux* abstention applies where there are uncertain questions of state law and an important state interest that is intimately involved with the government's prerogative beyond the mere fact of invoking a specific area of law.

With respect to the first *Thibodaux* question, the court held that it could not reasonably predict how Ohio state courts would apply policy exclusions, noting that an understanding of "occupational disease" had been developed in the context of worker's compensation but not insurance policy exclusions under Ohio law. Regarding the second *Thibodaux* question, the court recognized the Sixth Circuit's understanding that insurance interpretation rules and regulations are largely matters of state law and best left to state courts.

*Burford* abstention applies when there is a difficult question of state law that bears on policies of substantial public import that "transcends the case at hand" and "when conflicting state and federal rulings on the question would be disruptive of state efforts to establish a coherent policy. The court again noted the Sixth Circuit's references to issues in this case as "untouched legal terrain" and explained that actions taken by Ohio to regulate insurance, including its creation of a dedicated state agency, evidenced a concern and desire for a uniform application of Ohio's insurance policy favored abstention. Ultimately, the court remanded the parties' competing declaratory judgment claims to state court and stayed Fire-Dex's breach of contract and bad faith claims.



## Lost Policies, Prior Settlements, Releases, and Dismissals

As PFAS have been produced and used dating back to the 1930s and 1940s, many claims potentially implicate legacy as well as current insurance policies. Accordingly, many policyholders are looking for legacy insurance policies and engaging insurance archeologists to identify potential coverage. In some instances, policyholders may be unable to establish alleged policies were actually issued or adduce sufficient proof of the terms of alleged policies.

Insurers are well-served by identifying settlement agreements and dismissal orders involving companies presenting forever chemical claims (as well as their predecessors and related companies) to see whether PFAS-related claims have been released or are barred in whole or in part by prior settlements and dismissals of prior coverage cases. It was not uncommon, particularly years ago, for toxic tort or environmental coverage litigation to result in settlement agreements providing full site releases, full policy releases, or releases beyond the specific claims litigated.

## Trigger of Coverage

Trigger of coverage may present issues in some PFAS-related coverage cases. In *Crum & Forster Specialty Ins. Co. v. Chemicals, Inc.*, for example, the insurer sought a declaration for the duty to defend in connection with several hundred personal injury lawsuits consolidated in the multidistrict litigation case, *In re Aqueous Firefighting Foams Prods. Liability Litigation*.

The complaints in the underlying cases did not allege the date when the firefighters were first exposed to the products or when they first manifested symptoms of injury from the products. The subject policies require bodily injury "first occurs during the policy period." The policies contain another provision stating that if the date of the injury could not be determined, then it would be deemed to have occurred before the policy period.

The district court denied the insurer's motion for summary judgment, noting the insurer had the burden to demonstrate that the dates of injury could not be determined or that the claims were outside the scope of coverage provided by the policies. So long as the date of injury "could" potentially be determined in future proceedings and "could" fall within the terms of the policies' coverage, the insurer was obligated to defend. As plaintiffs in the underlying cases alleged dates of employment during the periods of the insurance policies at issue, the district court ruled that a defense was owed. In some PFAS-related actions, the issue of a trigger may preclude or limit the policies implicated by some PFAS-related claims.

## Allocation and Coordination of PFAS Coverage Issues

Depending on the types of policies involved in a coverage action and the claim facts, several allocation-related issues may be presented. There may be issues concerning which, if any, lines of coverage respond to a claim, and coordination or priority of coverage issues may be presented. Allocation of loss issues may also be significant in many cases.

One court recently applied to PFAS claims the same allocation rules applied to other long tail claims. In addition to allocation methodology, other issues may be presented and limit (or increase) the insurance contracts impacted and the extent of potential coverage, including treatment of multi-year policies, stub policies, policy extensions, exhaustion, the impact of insurance unavailability, and a number of occurrence(s) issues.

## Non-Covered Items

PFAS-related claims may also seek damages or other relief not covered under the particular policy at issue. For example, claims involving matters such as regulatory compliance costs, punitive damages, costs of doing business, economic loss, or medical monitoring may not be covered under liability policies. Additionally, the characterization of particular items, such as remedial investigation/ feasibility studies (RI/FS costs) as defense costs or indemnity may be an issue in some cases.





## Pollution Exclusions

Various forms of pollution exclusions have been included in insurance policies going back to the 1970s and before. Many PFAS-related claims – depending upon the facts and controlling law – may be barred in whole or in part by the "sudden and accidental" pollution exclusion, the "absolute" pollution exclusion, the "total" pollution exclusion, or other forms of pollution exclusions. Issues concerning the application of pollution exclusions will be familiar to veterans of the environmental coverage wars. These may include whether PFAS are "pollutants," whether there was a discharge or release, whether the discharge was "sudden and accidental," whether the matter involves "traditional" environmental pollution, and whether a hostile fire exception applies.

Some early decisions have held that pollution exclusions bar coverage for PFAS claims. Courts have differed in their application of such exclusions in the context of PFAS-related claims as they have in the broader context of environmental coverage claims.

In *Tonoga, Inc. v. New Hampshire Ins. Co.*, the intermediate New York appellate court addressed the application of both the "total" pollution exclusion and the "sudden and accidental" pollution exclusion. Tonoga settled an action with the New York State Department of Environmental Conservation, which accused Tonoga of polluting soil, air, and water supplies in Petersburg, New York. Multiple lawsuits were filed against Tonga subsequently, for which it also sought defense and indemnity. The policyholder's manufacturing process from 1961 to 2013 generated PFOA and PFOS byproducts and waste materials that were, in turn, discharged into the environment as part of the plaintiff's routine processes.

The appellate court affirmed the trial court's ruling that the insurers had no duty to defend or indemnify, concluding coverage was barred by both the "sudden and accidental" and "total" pollution exclusions. The "total" pollution exclusion plainly applied. The appellate court affirmed the trial court's ruling that allegations in the complaint that PFAS were improperly dumped and spilled over a period of many years prohibited the conclusion that the pollution was abrupt or unintentional. The court rejected Tonoga's argument that the suggestion there may be other ways the PFAS were discharged into the environment was sufficient to raise the possibility the "sudden and accidental" exception applied "given that the gravamen of each suit [was] decidedly plaintiff's knowing discharge of PFOA and/or PFOS as part of its routine manufacturing processes."

By contrast, in *Wolverine World Wide, Inc. v. The American Ins. Co.*, the court found the "sudden and accidental" pollution exclusion did not preclude the insurer from being required to provide a defense. Wolverine, a footwear manufacturer, was the subject of hundreds of individual tort actions, three consolidated class actions, an individual landowner suit, and two governmental enforcement actions alleging it was responsible for PFAS in the groundwater as a result of its use of the product Scotchgard in its manufacture of footwear from 1958 through 2002. The court ruled that the insurers were required to defend Wolverine in these matters until it was determined that every claim in the lawsuit involving pollution was conclusively determined to be intentionally discharged by Wolverine.

In *Colony Ins. Co. v. Buckeye Fire Equipment Co.*, the court held the insurer did not have a duty to defend most toxic tort claims relating to fire equipment containing fire-suppressing foam that included PFAS. The court concluded that the "total" pollution exclusion barred the majority of cases that alleged injury or damage solely from environmental exposure to PFAS. However, in some cases (approximately one-third), harm was also alleged from direct exposure to the products. The court ruled the insurer had a duty to defend the direct exposure cases because those cases did not involve "traditional environmental pollution" and were not within the gambit of the "total" pollution exclusion under North Carolina law. Many courts in other contexts have not limited the application of the "total" pollution exclusion to "traditional environmental pollution," and many PFAS cases involve "traditional environmental pollution."

Finally, in *Grange Ins. Co. v. Cycle-Tex Inc.*, the court issued a declaratory judgment in favor of the insurer, concluding the underlying lawsuit fell squarely within the policy's "total" pollution exclusion. The "total" pollution exclusion excluded coverage for:

1. bodily injury or property damage 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 pollutants at any time; and
2. any loss arising out of a request, demand, order, or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify, neutralize, or in any way respond to or assess the effects of



pollutants.

Cycle-Tex operated a thermoplastic recycling facility and was sued for allegedly discharging harmful PFAS into the North Georgia waterways. Plaintiffs alleged they suffered damage to their health by ingesting contaminated water, causing property damage resulting from contamination of the water supply, and paying surcharges and heightened water rates due to the contamination. Grange agreed to defend Cycle-Tex in the litigation under a full reservation of rights and sought a declaratory judgment that it had no duty to indemnify or defend based on the policy's "total" pollution exclusion.

The court easily found that PFAS were "pollutants" under the policy because both the definition of "pollutant" included chemicals and because Georgia courts emphasized the broad reach of the term "pollutant." The court concluded claims that the plaintiffs suffered bodily injury and property damage plainly fell within the first clause of the exclusions.

Although the plaintiffs' claim for an increase in water costs did not fit within the first clause of the pollution exclusion, the court concluded it was reasonable to infer the increased water costs resulted from the city's compliance with environmental laws and its response to a demand or request that the city protect its citizens from a dangerous nuisance. Accordingly, the court held that the claims for water costs were barred by the second clause in the pollution exclusion.

## PFAS-Specific Exclusions

Various forms of specific PFAS or forever chemical exclusions may be included in policies of more recent vintage. For instance, Lloyd's Market Association unrolled a couple of model exclusions in 2022, and the Insurance Service Office, Inc. recently released its own PFAS exclusions for various policy forms.

## Other Exclusions

Other exclusions such as owned property, intentional act, and occupational disease exclusions may bar or limit coverage for particular claims. For example, *James River Ins. Co. v. Dalton-Whitfield Regional Solid Waste Management Authority* involved a different insurance policy and different types of exclusions but concerned the same underlying action as Cycle-Tex. The policyholder, a public solid waste authority, allegedly operated landfills and discharged PFAS-contaminated substances to a treatment works area.

The exclusion at issue was not a pollution exclusion but rather an exclusion for bodily injury or property damage that was "expected or intended from the standpoint of the insured." The court held that because one or more claims in the underlying complaint asserted negligence and nuisance, the policy did not unambiguously exclude coverage. The court dismissed with prejudice the insurer's declaratory relief action with respect to the duty to defend and dismissed without prejudice the insurer's declaratory relief action with respect to the duty to indemnify as being not ripe, pending judgment in the underlying action.

## Knowledge-Based Defenses

Some coverage actions may implicate knowledge-based defenses such as the absence of an "accident" or "occurrence," expected or intended damages, known loss, loss in progress, lack of fortuity, or improper disclosure (misrepresentations or failure to disclose material facts) in connection with obtaining or renewing coverage.

## Noncompliance With Policy Terms and Conditions

Noncompliance with notice, cooperation, and other policy terms, definitions, and conditions may bar or limit coverage in some instances. Past voluntary payments or defense fees incurred prior to proper notice or tender may not be covered.

Environmental impairment or pollution policies often have additional requirements that must be satisfied as well. Many such policies (and some general liability policies) are written on a claims-made basis. The policyholder must satisfy any claims-made and reporting requirements. In a case involving EtO emissions from Medline's medical instruments sterilization facility in Waukegan, Illinois, for example, the Illinois appellate court ruled there was no coverage under a



pollution liability policy because the discharges had been occurring since 1994, long before the policy's September 2018 retroactive date. These types of issues may be presented with PFAS claims as well.

## Issues Arising From Policyholder Bankruptcies

Other considerations arise where policyholders become embroiled in bankruptcy proceedings on account of mounting PFAS-related liabilities or for other reasons. These policyholders may attempt to use bankruptcy law to limit or shed their liabilities. In such cases, some of the bankruptcy issues insurers have addressed in asbestos, talc, and sexual molestation claims may be presented in connection with PFAS-related claims.

Having PFAS-related liabilities embroiled in bankruptcy is more than an abstract possibility. Kidde-Fenwal, Inc., a fire suppression company, filed a bankruptcy petition in May 2023, citing over \$1 billion in PFAS-related liabilities. In November 2023, Kidde-Fenwal initiated an adversary proceeding seeking insurance coverage from approximately thirty insurers. Lexington Insurance Co. and National Union Fire Insurance Co. of Pittsburgh, Pa. filed a motion to stay claims in favor of arbitration based upon an arbitration provision contained in its policies.

Kidde-Fenwal responded by arguing the policies contain "only a narrow arbitration provision" that merely delegates "interpretation" of the pollution exclusion – not its "applicability" – to arbitration. Century Indemnity, another insurer sued in the adversary proceeding, moved to dismiss or for a more definite statement of claims, arguing that Kidde-Fenwal's complaint fails to allege that Kidde-Fenwal started manufacturing AFFF within the period of the Century Indemnity policy. The motions remain pending as of the time this commentary was prepared.

## Will PFAS Prove to be the Next Asbestos?

Commentators have offered predictions about the extent of losses insurers may sustain from PFAS-related claims. Some predict that PFAS-related losses could rival or exceed insurer asbestos-related losses. Praedicat, for example, estimates that the United States' cleanup costs for PFAS-contaminated water alone could exceed \$400 billion for insurers.

This amount does not include potential losses in product liability, personal injury, and director and officer lawsuits. Forecasts of PFAS-related exposures, however, vary considerably and will evolve. The exposures will play out over an extended time period. The ultimate cost to the insurance industry will depend upon a variety of factors, many of which remain unknown or incapable of accurate assessment at this time.

In reality, PFAS litigation and exposures will follow their own course. On the one hand, factors such as social inflation, the "all of government" approach to ESG, the devotion of substantial resources by the plaintiffs' bar, and the use of reptilian tactics—which were not present at the beginning of the asbestos litigation explosion at least to the same extent as they are now—will fuel PFAS litigation. On the other hand, the science and proof of PFAS-related bodily injuries and damages are still developing; identifying the parties and products responsible for particular PFAS-related injury or damage may present difficulties in many cases, substantial causation issues exist, and no specific disease tied exclusively to PFAS has yet to emerge that is similar to mesothelioma from exposure to asbestos.

The insurance dynamics are also different. Many legacy policies are lost, settled, released, exhausted, or impaired. Coverage under more recent policies is likely to be more restrictive, contain applicable exclusions, be written on a claims-made basis, and present coverage defenses not available to the same extent with respect to asbestos-related liabilities.

Many insurers are employing sound underwriting practices, loss control services, staff, policyholder education, and outstanding claims professionals and attorneys to contain PFAS-related exposures. More globally, insurers and their policyholders would be well-served by taking many of the steps to confront and contain social inflation that are applicable to PFAS-related claims.



## Takeaways for Insurers

Policyholders and insurers will undoubtedly draw upon their experiences with asbestos and other environmental coverage litigation. Often, the lessons learned will prove to be instructive. Indeed, some of the case law will be instructive or even controlling. Nonetheless, the parties and their counsel should keep in mind that the science associated with PFAS chemicals is developing, and different arguments may be presented in the context of particular PFAS-related coverage claims.

A premium remains creative as neither policyholder nor insurer representatives are likely to be well-served by the rote application of arguments, strategies, or tactics employed in traditional environmental claims and cases.

It will be important for insurers and policyholders to have a stable of solid experts and capable defense and coverage counsel retained for PFAS and coverage litigation and to get ahead of the junk science funded by the plaintiffs' bar. An insurer's approach must be flexible to account for the policies at issue, the particular policyholder and its coverage program, claim-specific facts, application of controlling law, and other factors related to the insurer's portfolio interests.

---

See Craig Liljestrand, "PFAS Exposure: A Comprehensive Look at Emerging Facts and Studies, Risk and Liability Assessment, Litigation History, Evolving Regulations and Future Predictions," *Defense Counsel Journal* (July 11, 2022).

United States Environmental Protection Agency, PFAS/EPA: Cross-Agency Research List, available at <https://comptox.epa.gov/dashboard/chemical-lists/EPAPFASRL> (last visited May 1, 2024).

See e.g., Sayuri Gavaskar, "PFAS and Health: Troublesome, Ubiquitous Chemicals to be Examined at YSPH Symposium," *Yale School of Med.* (Dec. 12, 2019), available at <https://medicine.yale.edu/news-article/pfas-and-health-troublesome-ubiquitous-chemicals-to-be-examined-at-ysph-symposium/> (last visited May 1, 2024).

Centers for Disease Control and Prevention, Per- and Polyfluorinated Substances (PFAS) Factsheet, available at [https://www.cdc.gov/biomonitoring/PFAS\\_FactSheet.html](https://www.cdc.gov/biomonitoring/PFAS_FactSheet.html) (last visited May 1, 2024) (finding PFOS (perfluorooctane sulfonic acid), PFOA (perfluorooctonic acid), PFHxS (perfluorohexane sulfonic acid) and FFNA (perfluorononanoic acid) were present in the serum of nearly everyone tested); see Nat'l Inst. Of Env'tl Health Sciences, Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS), available at <https://www.niehs.nih.gov/health/topics/agents/pfc> (last visited May 1, 2024) (noting PFAS have been found in the blood of 97% of Americans).

See "Tap water study detects PFAS 'forever chemical' across the US" *U.S. Geological Survey*, available at <https://www.usgs.gov/news/national-news-release/tap-water-study-detects-pfas-forever-chemicals-across-us> (July 5, 2023).

See Centers for Disease Control and Prevention, *supra* note iv.

See <https://www.nrdc.org/stories/forever-chemicals-called-pfas-show-your-food-clothes-and-home>.

See Amanda Morris, "' Forever chemicals' destroyed by simple new method: Process beheads PFAS, causing it to fall apart into benign end products," *Northwestern Now* (Aug. 18, 2022), available at <https://news.northwestern.edu/stories/2022/08/forever-chemicals-destroyed-by-simple-new-method/> (last visited May 1, 2024).

*Casualty panel warns of PFAS risk amid potential for \$80bn of US litigation*, *The Insurer TV* (Sept. 23, 2024), available at <https://www.theinsurertv.com/reinsurancemonth/casualty-panel-warns-on-pfas-risk-amid-potential-for-80bn-of-us-litigation/> (last visited Sept. 28, 2024).

Public documents from the PFOA Stewardship Program are available in EPA Docket [EPA-HQ-OPPT-2006-0621](https://www.epa.gov/docket/EPA-HQ-OPPT-2006-0621).

See United States Environmental Protection Agency, EPA Continues to Take Action on PFAS to Protect Public (Feb. 14, 2023), available at <https://www.epa.gov/newsreleases/epa-continues-take-action-pfas-protect-public>.

See United States Environmental Protection Agency, PFAS Strategic Roadmap: EPA's Commitments to Action 2021-2024, available at <https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024>.



See United States Environmental Protection Agency, EPA Finalizes Rule to Require Enhanced PFAS Reporting to Toxics Release Inventory (Oct. 19, 2023), available at <https://www.epa.gov/newsreleases/epa-finalizes-rule-require-enhanced-pfas-reporting-toxics-release-inventory>.

Environmental Protection Agency, 40 CFR § 705, available at <https://www.federalregister.gov/documents/2024/09/05/2024-19931/perfluoroalkyl-and-polyfluoroalkyl-substances-pfas-data-reporting-and-recordkeeping-under-the-toxic> (lasted visited Sept. 22, 2024).

United States Environmental Protection Agency, Addition of Certain PFAS to TRI (National Defense Authorization Act) (Nov. 23, 2022), available at <https://www.epa.gov/toxics-release-inventory-tri-program/addition-certain-pfas-tri-national-defense-authorization-act>.

See United States Environmental Protection Agency, Biden-Harris Administration Finalizes Rule to Prevent Inactive PFAS from Reentering Commerce (Jan. 11, 2024), available at <https://www.epa.gov/newsreleases/biden-harris-administration-finalizes-rule-prevent-inactive-pfas-reentering-commerce>.

See United States Environmental Protection Agency, Per- and Polyfluoroalkyl Substances (PFAS) in Drinking Water (last visited Jan. 10, 2024), available at <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>.

See *Orange Cnty. Water Dist. v. AGC Chemicals Americas Inc.* 8:24-cv-00820 (C.D. Cal. April 12, 2024).

See United States Environmental Protection Agency, Biden-Harris Administration Finalizes Critical Rule to Clean PFAS Contamination, Protect Public Health and the Environment (Apr. 26, 2024), available at <https://www.epa.gov/newsreleases/biden-harris-administration-finalizes-critical-rule-clean-pfas-contamination-protect> (last visited May 1, 2024).

See David M. Uhlmann, *PFAS Enforcement Discretion and Settlement Policy Under CERCLA*, U.S. ENV'T PROT. AGENCY (Apr. 19, 2024).

See Sarah Grace Hughes, *Process & Considerations for Setting State PFAS Standards*, ECOS PFAS Caucus, available at <https://www.ecos.org/documents/ecos-paper-processes-and-considerations-for-setting-state-pfas-standards-2024-update/> (lasted visited Sept. 30, 2024).

*State of Minn. v. 3M Co.*, No. 27-CV-10-28862 (4th Judicial Dist., Hennepin County, Minn. Dec. 30, 2010) (settled Feb. 20, 2018); see generally, Minn. Pollution Control Agency, Minnesota 3M PFAS Settlement, available at <https://3msettlement.state.mn.us/> (last visited 8/1/2023).

*Wolverine World Wide v. Am. Ins. Co.*, No. 1:19-cv-10 (W.D. Mich. Jan. 7, 2019) (settled 2020); see generally, Plainfield Charter Township, Wolverine Worldwide PFAS Settlement, available at [https://www.plainfieldmi.org/information\\_about/pfas\\_settlement/](https://www.plainfieldmi.org/information_about/pfas_settlement/) (last visited May 1, 2024).

*Burdick v. Tonoga, Inc.*, No. EF2016-253835 (N.Y. Sup. Ct. Rensselaer Cty. Nov. 15, 2016) (settled October 2021); see generally, Caroline Vakil, "Plastics Company Agrees to \$23M Settlement in Drinking Water Pollution Case," *The Hill* (Oct. 2, 2021), available at <https://thehill.com/policy/energy-environment/575035-plastics-company-agrees-to-23m-settlement-in-drinking-water/> (last visited May 1, 2024).

*Campbell v. Tyco Fire Products*, Case No. 2:19-cv-00422, part of *In Re: Aqueous Film-Forming Foams Products Liability Litigation*, MDL No. 2:18-mn-2873 (D.S.C.) (settled January 2021), see generally, Environment + Energy Leader, Johnson Controls Settles Lawsuit for PFAS Contamination, Agrees to \$17.5M Compensation (Jan. 1, 2021), available at <https://www.environmentenergyleader.com/2021/01/johnson-controls-settles-lawsuit-for-pfas-contamination-agrees-to-17-5m-compensation/#:~:text=Johnson%20Controls%20has%20agreed%20to%20pay%20%2417.5%20million,Fire%20Products%20is%20a%20subsidiary%20of%20Johnson%20Controls> (last visited May 1, 2024).

See generally, Dupont, DuPont, Corteva, and Chemours Announce Resolution of Legacy PFAS Claims (Jan. 22, 2021), [www.dupont.com/news/dupont-corteva-chemours-announce-resolution-legacy-pfas-claims.html](http://www.dupont.com/news/dupont-corteva-chemours-announce-resolution-legacy-pfas-claims.html) (last visited May 1, 2024).





*Id.*; *In Re: E.I. Du Pont de Nemours and C-8 Personal Injury Litig.*, No. 2:13-md-2433 (S.D. Ohio April 9, 2013) (settled 2021).

*City of Camden. v. DuPont*, No. 2:23-cv-03230, part of *In Re: Aqueous Film-Forming Foams Products Liability Litigation*, MDL No. 2:18-mn-2873 (D.S.C.) (settlement reached June 2023, pending court approval); see generally, Dupont, Chemours, Dupont, and Corteva Reach Comprehensive PFAS Settlement with U.S. Water Systems (June, 2, 2023), available at [www.investors.dupont.com/news-and-media/press-release-details/2023/Chemours-DuPont-and-Corteva-Reach-Comprehensive-PFAS-Settlement-with-U.S.-Water-Systems/default.aspx](http://www.investors.dupont.com/news-and-media/press-release-details/2023/Chemours-DuPont-and-Corteva-Reach-Comprehensive-PFAS-Settlement-with-U.S.-Water-Systems/default.aspx) (lasted visited May 1, 2024).

*City of Camden v. 3M Co. (In re Aqueous Film-Forming Foams Prods. Liab. Litig.)*, 2024 U.S. Dist. LEXIS 57849, 2024 WL 1341122 (D.S.C. Mar. 29, 2024)

*Settlement Agreement for Water Systems*, Johnson Controls International PLC, Form 8-K, Exhibit 10.1 (April 12, 2024), available at <https://www.sec.gov/ix?doc=/Archives/edgar/data/0000833444/000083344424000023/jci-20240412.htm> (last visited Sept. 24, 2024).

Public Water System Settlements, Aqueous Film-Forming Foam (AFFF) Product Liability Litigation (MDL 2873) (updated July 3, 2024), available at <https://www.pfaswatersettlement.com/> (last visited Sept. 25, 2024).

*BASF Corporation enters class settlement with U.S. public water systems*, BASF (May 21, 2024), available at <https://www.basf.com/us/en/media/news-releases/2024/05/basf-corporation-enters-class-settlement-with-u-s-public-water-> (last visited Sept. 22, 2024).

See, e.g., *Grosch v. Tyco Fire Prods. LP*, No. CV-23-01259-PHX-DWL, 2023 U.S. Dist. LEXIS 164460 (D. Ariz. Sep. 15, 2023).

See, e.g., *In re Aqueous Film-Forming Foams Prods. Liab. Litig.*, No. MDL No. 2:18-mn-2873-RMG, 2023 U.S. Dist. LEXIS 86942 (D.S.C. May 5, 2023).

See, e.g., *Vermont v. 3M Co.*, No. 2:24-cv-19, 2024 U.S. Dist. LEXIS 67268 (D. Vt. Apr. 12, 2024); see also *Delaware v. 3M Co.*, No. N23C-10-272 (Del. Super. Ct.).

"More than half of US State Attorneys General have taken action against PFAS manufacturers and key users." *Bloomberg Law* (updated April 16, 2024), available at <https://www.saferstates.org/press-room/more-than-half-of-us-state-attorneys-general-have-taken-action-against-pfas-manufacturers-and-key-users/> (lasted visited May 1, 2024).

See, e.g., *Giordano v. Solvay Specialty Polymers USA, LLC*, 522 F. Supp. 3d 26 (D.N.J. 2021).

See, e.g., *Parris v. 3M Co.*, 595 F. Supp. 3d 1288 (N.D. Ga. 2022).

See, e.g., *McDowell v. Mc. Donald's Corp.*, No. 1:22-cv-01688 (N.D. Ill. Mar. 31, 2022) (voluntarily dismissed Jan. 9, 2024); see also *Hussain v. Burger King Corp.*, No. 4:22-cv-02258 (N.D. Cal. Apr. 11, 2022) (voluntarily dismissed Aug. 22, 2022).

*Morton v. Health-Ade LLC*, No. 7:24-cv-00173 (S.D.N.Y. Jan. 9, 2024).

*Onaka v. Shiseido Ams. Corp.*, 2024 U.S. Dist. LEXIS 50613, at \*6 (S.D.N.Y. Mar. 19, 2024).

See *Ambrose v. Kroger Co.*, 3:20-cv-04009 (N.D. Cal. June 16, 2020); see also *Nguyen v. Amazon.com, Inc.*, 4:20-cv-04042 (N.D. Cal. June 17, 2020).

87 F.4th 315 (6th Cir. 2023).

See generally, S.M. Seaman and J.R. Schulze, *Allocation of Losses in Complex Insurance Coverage Claims* (12th Ed. Thomson Reuters 2024) at Chapter 21 (Sustainability/ESG (Environmental, Social, and Governance Considerations & PFAS)).



2023 U.S. App. LEXIS 14822 (6th Cir. June 13, 2023).

*Admiral Ins. Co. v. Fire-Dex, LLC*, No. 22-3992, 2023 U.S. App. LEXIS 14822, at \*1 (6th Cir. June 13, 2023).

See, e.g., *Dianoia's Eatery, LLC v. Motorists Mut. Ins. Co.*, 10 F.4th 192, 208-211 (3d Cir. 2021).

*Fire-Dex, LLC v. Admiral Ins. Co.*, No. 1:23-cv-1612, 2024 U.S. Dist. LEXIS 141608, at \*11 (N.D. Ohio Aug. 9, 2024).

2021 U.S. Dist. LEXIS 146702 (S.D. Tex. Aug. 5, 2021).

See, e.g., *Century Indemnity v. Tyco Fire Products*, Case No. 2022CV000283 (Marinette Cnty. Cir. Ct. March 21, 2024) (Order on Allocation of Coverage).

See, e.g., *Century Indemnity v. Tyco Fire Products*, Case No. 2022CV000283 (Marinette Cnty. Cir. Ct. Jan. 24, 2024) (Decision and order) (finding that AFFF contamination of water providers' water supplies throughout the country constituted multiple occurrences).

2022 NY Slip Op 00094, 201 A.D.3d 1091 (App. Div. 3rd Dept.).

2020 U.S. Dist. Lexis 194709 (W.D.N.C. Oct. 20, 2020), *aff'd per curiam*, 2021 U.S. App. LEXIS 34305 (4th Cir. Nov. 18, 2021).

2022 U.S. Dist. LEXIS 238863, 2022 WL 18781187 (N.D. Ga. Dec. 5, 2022).

See CG 34 95 Exclusion (products/completed operations liability coverage part/Owners and Contractors protective liability coverage part); CG 34 96 Exclusion (railroad protective liability coverage part); CG 40 32 Exclusion (commercial liability coverage part); CU 34 54 Exclusion (commercial liability umbrella coverage part); CX 21 97 Exclusion (commercial excess liability coverage part); BP 15 91 Exclusion (business owners form); and CA 24 19 Exclusion (auto dealers coverage form).

2022 U.S. Dist. LEXIS 238961 (N.D. Ga. Nov. 7, 2022).

*James River Ins. Co. v. Dalton-Whitfield Reg'l Solid Waste Mgmt. Auth.*, No. 4:22-cv-41-AT, 2022 U.S. Dist. LEXIS 238961, at \*9 (N.D. Ga. Nov. 7, 2022) (applying Georgia law and holding that expected and intended exclusion did not preclude insurer from defending insured against negligence claims).

*Union Ins. v. Medline Indus.*, 2022 IL App (2d) 210175, ¶¶ 37-40.

See generally, S.M. Seaman and J.R. Schulze, *Allocation of Losses in Complex Insurance Coverage Claims* (12th Ed. Thomson Reuters 2024) at Vol. 1, Chapter 9 (Insolvency of Underlying Insurers (The Issue of "Drop Down" and the Impact of the Policyholder's Bankruptcy On Insurers)).

See *In re Kidde-Fenwal, Inc.*, No. 23-10638 (Bankr. D. Del. May 15, 2023).

*Kidde-Fenwal, Inc. v. Ace Am. Ins. Co.*, No. 1:23-ap-50758 (Bankr. D. Del. Nov. 9, 2023).

See Gary Booth, "PFAS – the mother of all toxic torts?" Insider Engage (Aug. 2, 2021), available at <https://www.insiderengage.com/article/28tq7id3b65wxgwiao4qo/legal-and-regulatory/pfas-the-mother-of-all-toxic-torts> (last visited May 1, 2024).

See generally, S.M. Seaman and J.R. Schulze, *Allocation of Losses in Complex Insurance Coverage Claims* (12th Ed. Thomson Reuters 2024) at Vol. 1, Chapter 19 (The Impact of Social Inflation on Insurers and Policyholders) and Vol. 1, Chapter 20 (Taming the Reptile and Containing Reptilian Theory).