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Financial Materiality of PFAS Is Rising

By: *Emily Wagner* | & *Kara Huang* | *September 7, 2023*

New York - At Calvert, one ESG issue we examine that is material to a wide range of companies is the use of per and polyfluoroalkyl substances (PFAS). These are a group of widely used chemicals valued for their versatility in repelling or resisting grease, oil, water and heat. Because they do not break down over time, they are commonly referred to as "Forever Chemicals" and are now widely used in applications like firefighting foams, water-resistant fabric and textiles, non-stick cookware and personal care products. Due to this ubiquitous use, PFAS chemicals can be found in water, air, fish and soil across the globe and have been found in blood levels of people and animals.

According to the Environmental Protection Agency (EPA), scientific studies have shown that exposure to some PFAS in the environment may be linked to harmful health effects¹ including kidney or testicular cancer, low infant birth weight and liver damage. As a result, the EPA is seeking to regulate PFAS in drinking water² and to designate it as a hazardous substance under the Comprehensive Environmental Response, Compensation & Liability Act (CERCLA) as soon as the first quarter of 2024.³ Some states have proposed banning PFAS,⁴ as has the European Union.⁵ And illustrating the issue's impact on corporations and investors, there is a \$10.3 billion to \$12.5 billion proposed settlement between 3M and water districts associated with PFAS multi-district litigation (MDL-2873).⁶

EPA action to serve as litigation catalyst

While any EPA actions will likely be challenged in the courts, the agency appears ready to set the standard for four widely studied PFAS chemicals at 4 parts per trillion, which is the lowest detectable level. Additionally, if certain PFAS chemicals are designated hazardous under CERCLA, this would also mobilize clean-up of polluted sites.

We see parallels in the PFAS story to asbestos, and therefore we expect a similar increase in litigation against PFAS producers and users. The ongoing multi-district litigation (MDL-2873) focuses on the manufacturing or use of aqueous film-forming foam and the alleged release of two kinds of PFAS into the environment. It is made up of thousands of personal injury claims from individual plaintiffs and contamination claims from state governments and local water authorities. The recently proposed settlement between 3M and the water authorities for up to \$12.5 billion and the DuPont/Chemours/Corteva settlement for \$1.19 billion cover only one group of plaintiffs, while the remainder of the MDL is ongoing.

We believe this proposed settlement will put a price on the PFAS externality, but we do not believe it will cover the true cost of remediation nor impact on human health.

Consumer sectors face potential litigation and reformulation costs

Outright bans of PFAS usage from the European Union and select U.S. states pose material implications to sectors that rely on them for product performance. Companies may need to invest heavily in in-house chemical reformulation or seek solutions providers in their upstream supply chains. And they may have to supplement materials innovation with increased transparency further up the supply chain to understand the entirety of chemical usage and develop disclosure practices that neither overstate safety nor understate risk.

Subsequently, we expect PFAS-related litigation to move down the value chain, from producers in the Industrials and Materials sectors to users in consumer-facing sectors. For example, manufacturers of water-resistant clothing and fabrics, as well as personal care products are more likely to rely on PFAS because of their powerful ability to resist heat, oil, stains, grease and water. Already, a handful of PFAS-related lawsuits centered around menstrual and cosmetic products have emerged, alleging irresponsible marketing practices. Demonstrating product harm in court can be difficult given the long-term nature of PFAS health effects, so we expect that future litigation will focus on the consumer need for understandable and transparent disclosure.

Parallels with BPA in the court of public opinion

Beyond litigation and regulation, there is also the court of public opinion. We can look to BPA (Bisphenol A) chemicals as a case study in the influence of consumer expectations. In 2008, the National Toxicology Program of NIH published research suggesting that BPA poses risks to human development from exposure in early life. While initial Congressional investigations focused on infant formula, the scope of the BPA issue soon found its way to other product manufacturers such as reusable bottles, canned food and beverages, and apparel.⁷ Although there are no federal bans of the chemical in the U.S., the public commonly expects manufacturers to label products "BPA-free" as a way to express safety assurance.

We expect a similar evolution of consumer nonacceptance of PFAS in products to occur over a number of years, as education improves and regulatory pressures increase.

Bottom line: Given the actions already being taken against PFAS at the state level and in the EU, and the expected finalization of the EPA's PFAS regulation in 2024, we see increased financial materiality around the issue.

1. "PFAS Explained," The United States Environmental Protection Agency.
2. "Per- and Polyfluoroalkyl Substances (PFAS): Proposed PFAS National Primary Drinking Water Regulation," U.S. Environmental Protection Agency.
3. "EPA Takes Important Step to Advance PFAS Strategic Roadmap, Requests Public Input and Data to Inform Potential Future Regulations under CERCLA," U.S. Environmental Protection Agency, April 13, 2023.
4. "PFAS in Products," Maine Department of Environmental Protection.
5. "Ban on PFAS Use and Production Proposed in European Union," Bloomberg Law, February 7, 2023.
6. "3M Reaches \$10.3 Billion Settlement in 'Forever Chemicals' Suits," The New York Times, June 22, 2023.
7. "Timeline: BPA from Invention to Phase-Out," The Environmental Working Group, April 22, 2008.



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