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Calvert's Research Process Examines PFAS Risk, Remediation

By: Emily Wagner | & Alysia Rodgers | January 17, 2024

New York - The issue of per and polyfluoroalkyl substances, commonly referred to as "forever chemicals," is rapidly evolving, and requires a nuanced approach to evaluate risk to issuers, especially as KPIs specific to PFAS are lacking (see [our previous post](#) for more details). At Calvert, our research process allows us to apply a discount to reflect both the materiality on stakeholders (from investors, employees and customers to local communities) and the impact to an issuer's enterprise value (equity, holders, debt holders, bankruptcy). This also considers company actions/response to a controversy.

For example, we used this approach in evaluating issuer 3M in July 2022, shortly after the EPA introduced its PFAS health advisory that served as a precursor to the proposed water standard and Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) designation that defines PFAS as a hazardous substance. We took this action based on an expected risk to future revenues and elevated cost of production given 3M's active production of certain PFAS chemicals as well as future litigation risk and containment costs in both the United States and Europe. At this point the issuer was already a named defendant in the multi-district litigation (MDL) with an estimated financial cost of \$10 billion to \$30 billion.

Down the supply chain, we look to evaluate the product portfolios at consumer companies to assess the relative risk that companies will face given developments in the regulatory landscape and growth in public health awareness of PFAS. In the apparel industry, for example, companies that manufacture waterproof goods such as raincoats or workout gear may be more at risk due to utilization of PFAS chemicals in waterproof goods. Similarly, products used by food packaging and carbonated beverage sectors have been found to contain PFAS due to material durability and carbonation processes. We believe that companies in this subindustry will face varying level of risk depending on availability and cost of non-PFAS alternatives as well as severity of health impacts and level of disclosure.

Opportunities in PFAS remediation

PFAS chemicals have historically been released into soil or water from production facilities, factories that use them in manufacturing, and firefighting foam. Strict restrictions on PFAS compounds found in water/soil imposed by regulation like CERCLA are anticipated to increase demand for PFAS remediation services, such as risk assessment and remediation technologies. As demand for these services grows, several sectors stand to benefit from this growing market opportunity.¹

The total U.S. market for PFAS-related remediation, estimated to be \$200 billion, has increased nearly 40% since 2019.² Examples include market players within the construction and engineering sector, as well as those in the environmental services, consulting industries and flow control equipment (machinery sector). Companies in these industries are focused on addressing both soil and water contamination, with remediation technologies differing between the two types of contamination. Currently, water remediation technologies are more established and widely used than soil remediation technologies, allowing for greater market opportunities. For example, AECOM's DE-FLUORO technology is a treatment technology that uses the process of electro-chemical oxidation to break down the carbon-fluorine bonds and destroy PFAS from contaminated liquids. This technology has been successfully used across large-scale programs in the U.S., Europe, and Australia, and is now commercially available to the industry.

Bottom line: Calvert's robust research process is well equipped to evaluate the risks and opportunities associated with PFAS chemicals. Our controversy evaluation process permits nuanced research and insights into risk for specific issuers, allowing us to reflect the Calvert Principles in our eligibility decisions. Additionally, collaboration among our sector-specific research teams enables us to anticipate the impact of this complicated, evolving issue along the value chain.

1. "What is the addressable PFAS market?" AECOM, Bank of America, June 14, 2023.

2. "What is the addressable PFAS market?" AECOM, Bank of America, June 14, 2023.

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"At Calvert, our research process allows us to apply a discount to an issuer's ESG performance to reflect both the materiality on stakeholders... and the impact to an issuer's enterprise value."



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