

DELIVERING IN THE MARKET

Groundbreaker. Game changer. Innovator.

TRC is a global firm providing environmentally focused and digitally powered solutions that address local needs. For more than 50 years, we have set the bar for clients who require consulting, construction, engineering and management services, combining science with the latest technology to devise solutions that stand the test of time. TRC's more than 7,000 professionals serve a broad range of public and private clients, guiding complex projects from conception to completion to help solve the toughest challenges. We break through barriers for our clients and help them follow through for sustainable results.

MARKETS WE SERVE



Power & Utilities



Transportation



Real Estate



Water



Government



Environmental & Sustainability



Digital Solutions



PFAS are a group of more than 10,000 man-made chemicals resistant to heat, water, and oil that have been used in the manufacturing of a number of consumer products, including stain-, water-, and oil-resistant fabrics. The regulatory framework and science of PFAS are rapidly evolving, creating business and environmental risks related to storage, management and use of PFAS-containing materials.

Designed and formulated for persistence, PFAS resist decomposition and can migrate from manufacturing processes, various waste streams, and emissions to our drinking water and atmosphere. Health concerns have influenced many states to sample water supplies and establish guidelines and/or enforcement limits. PFAS in the textile and carpet industries are being especially targeted due to their widespread use in protecting a majority of consumer products, such as waterproof jackets or stain-resistant carpets and furniture. These PFAS-based repellents are applied as a thin film on the fabric surface, potentially releasing PFAS from the fabric surface during the manufacturing, use, and disposal. Companies in the textile and carpet industries should be preparing for new regulations that federal and state agencies are developing.

Currently, EPA is planning to target approximately 2,200 textile manufacturing facilities within the United States with a mandatory information collection request (ICR). This ICR is anticipated to focus on facilities that perform one or more of the following operations and discharge process wastewater to surface waters or to publicly owned treatment works (POTWs):

- · Wool scouring;
- · Wool finishing;
- Yarn and unfinished fabric manufacturing;
- Woven fabric finishing;
- Knit fabric finishing;

- Carpet finishing; and
- Nonwoven textile products of wool, cotton, synthetics, or blends of such fabrics.

EPA may also require wastewater sampling from a subset of these facilities, based on the responses, to characterize wastewater discharges from the textile industry. Ultimately, the responses may also support EPA's efforts to develop and propose new regulations. EPA plans to estimate current pollutant mass loads and achievable reductions for available technologies for the industry and to determine if the effluent limitations guidelines (ELGs) limiting pollutant discharges from industrial point source categories under the Clean Water Act should be revised.

An increasing number of states and municipalities are conducting groundwater, surface water and soil sampling to determine PFAS levels in these media, and EPA has conducted two rounds of drinking water supply sampling under the Safe Drinking Water Act. Many states and municipalities are also requiring facilities that discharge stormwater and wastewater to sample receiving streams for PFAS compounds to identify potential sources of PFAS.

What Do You Care About?	
Question	TRC's Solutions
Do I have PFAS?	Risk management reviews/ planningSite investigationsWater and wastewater testingAir testing
Is it really mine?	ForensicsFate and transport modelingBackground sampling
How much is it going to cost?	Risk assessmentAlternative remediesCost/scenario modeling
When will I be done?	Regulatory negotiationsSmart closure strategies

OUR SERVICES

Carpet and textile manufacturing facilities are advised to develop proactive response strategies to better understand current and historical use of fluorinated chemicals in their operations and to be prepared for the regulations. Some potential action items that TRC can support you with are as follows:

- Conduct a facility or company-wide risk management review to understand potential PFAS exposure
 - Initiate system-wide chemical inventories to identify PFAS-containing materials (e.g., water-proofing agents) in the supply chain
 - Evaluate the supply chain regarding the presence of PFAS; work with suppliers, if possible, for verification statements of PFAS compliance
 - Understand the PFAS-free alternatives available
 - Track regulations in applicable states and understand PFAS waste disposal requirements at different locations
 - Follow new enforcement and compliance obligations involving PFAS and PFAS-containing products
 - · Document potential areas of PFAS impacts
- Implement a plan and schedule for switching out materials that contain PFAS, if possible
- Develop and update plans and standard operating procedures to address environmental, health and safety risks, such as stormwater pollution, hazmat spills and wastewater discharges
- Create goal-oriented sampling plans of stormwater, wastewater, groundwater, soil and air, as appropriate
- Develop a plan for disposal of PFAS-containing materials
- Implement a plan for the inspection, maintenance and repair of sub-slab/in-slab infrastructure (e.g., drains, vaults, sump pits, trenches) with potential connections to subsurface soils and groundwater
- Perform inspections of plant air scrubbers, roof drains and drain discharges

Nationwide Expertise in PFAS Research and Regulation

TRC's Center of Research and Expertise (CORE) is a national leader in PFAS risk management, regulatory support, toxicity evaluation, forensics, fate and transport, sampling, testing and remediation methods. TRC will bring our extensive experience to your project to help you manage your concerns, solve your problems and move on to your next priority with confidence.

TRC's overall goal is to help clients manage their risks at a time of regulatory uncertainty. With staff located throughout the country, we bring both a national and local perspective to PFAS-related issues and how developing legislation will impact the future.



