Perfluoroalkyl and polyfluoroalkyl substances (PFAS)

TX RPC Project Legislative Rapid Response Request

March 3, 2025

Introduction

- Per- and polyfluoroalkyl substances (PFAS) are a large group of manufactured chemicals that have been widely used in industry since 1940s.[1]
- Many of the PFAS break down very slowly and can accumulate over time in the environment, animals, and human bodies.[1]

PFAS can be found in everyday products, including:[1]

- **Drinking water** such as water systems and wells
- **Food** such as fish and livestock exposed to PFAS
- **Food packaging** such as grease-resistant paper, fast food containers, wrappers
- **Personal care products** such as shampoo and cosmetics
- **Household products** such as clothing, cleaning products, paints, non-stick cookware
- **Fire extinguishing foam**

Health Implications and PFAS

Due to the persistence in the environment and potential health risks, PFAS have become a significant concern in public health and environmental policy.

Exposure to high levels of PFAS is associated with various health outcomes and diseases with **sufficient** evidence, for example[3]

Immunological	Cardiometabolic	Developmental	Cancer
Decreased antibody response	Abnormal levels of lipids in the blood	Decreased infant and fetal growth	Increased kidney cancer risk

More than 97% of the Americans aged 12-80 years have detectable PFAS in the blood.[2]

- PFAS is associated with the following health outcomes and diseases with **limited** evidence:[3]
  - Increased risk of breast and testicular cancer in adults.
  - Increased risk of pregnancy-induced hypertension.
  - Increased risk of thyroid disease and dysfunction.
  - Increased risk of ulcerative colitis, a chronic disease that causes inflammation in the colon.

PFAS Legislation

In response to growing concerns over PFAS contamination, several legislative and regulatory measures were initiated at the national level and in Texas:

- **Public Water Systems Monitoring**
  - In April 2024, the U.S. Environmental Protection Agency (EPA) announced final rules for maximum PFAS chemical levels in public drinking water systems. [4]
  - Public water systems are required to test for PFAS levels within three years and implement measures to reduce PFAS levels above the new maximum levels within five years. [4]
  - The EPA is collaborating with state regulators to provide grant funding and technical assistance to help public water systems comply with these new rules. [5,6]
- **State Legislation**
  - In December 2024, House Bill 1674 was filed aiming to regulate the production, sale, and use of agricultural products containing PFAS. [7,8]
  - The bill seeks to establish limits on PFAS in such products and mandates regular testing to prevent contamination of agricultural lands and water sources. [7,8]
- **Local Water Systems Monitoring**
  - In Austin, Texas, the local water utility, Austin Water, concluded PFAS monitoring and testing in December 2024. [9]
  - The tests measured the levels of 29 specific PFAS chemicals, six of which are soon to be regulated. [10]
  - The results are being analyzed to determine the necessary actions to ensure safe drinking water for the community.

Challenges and Future Considerations

Despite these efforts, challenges remain to effectively manage PFAS contamination:

- **Detection and Remediation**
  - PFAS are difficult to detect and remove from the environment due to their chemical stability. [11]
  - Advanced treatment technologies are required to address contamination, which can be costly and complex. [11]
- **Regulatory Variability**
  - There is variability in PFAS regulations across different states and localities, leading to inconsistencies in public health protection. [12,13]
  - Uniform federal standards could enhance the effectiveness of mitigation efforts.
- **Public Awareness and Water Treatment**
  - Increasing public awareness about PFAS and their potential health impacts is crucial for community engagement and support for regulatory measures. [14]
  - Using treatment technologies to reduce PFAS in drinking water at home, such as [15]
    - Activated carbon filter.
    - High-pressure membranes: nanofiltration or reverse osmosis.
    - Ion exchange resins.

Conclusion

PFAS contamination presents significant public health and environmental challenges in Texas. While legislative and regulatory actions are underway to address these issues, ongoing efforts are necessary to protect public health and the environment from the adverse effects of PFAS exposure.

Appendix: PFAS-Related Texas Legislation

2025 Proposed Legislation

- **HB 1674**: Relating to the production, sale and use of certain agricultural products containing perfluoroalkyl and polyfluoroalkyl substances (PFAS); creating a criminal offense.
- **HB 1730**: Relating to a study regarding the effects of perfluoroalkyl and polyfluoroalkyl chemicals on public health.
- **SB 768:** Relating to the study regarding the effects of perfluoroalkyl and polyfluoroalkyl chemicals on public health.
- **SB 886**: Relating to the production, sale, and use of certain agricultural products containing perfluoroalkyl and polyfluoroalkyl substances (PFAS); creating a criminal offense.

Past Legislation

- **HB 4506**: Relating to the regulation of certain hazardous substances used in firefighting products.

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