Understanding PFAS in Emerging Regulations and Issues in Business Transactions

July 25, 2023

CALFEE

CALFEE, HALTER & GRISWOLD LLP

Member LexMundi World Ready

Roadmap

- What are PFAS?
- U.S. Federal Regulations and Legislation
- State Regulatory Landscape
- Litigation and Theories of Liability
- Impacts to Business Transactions

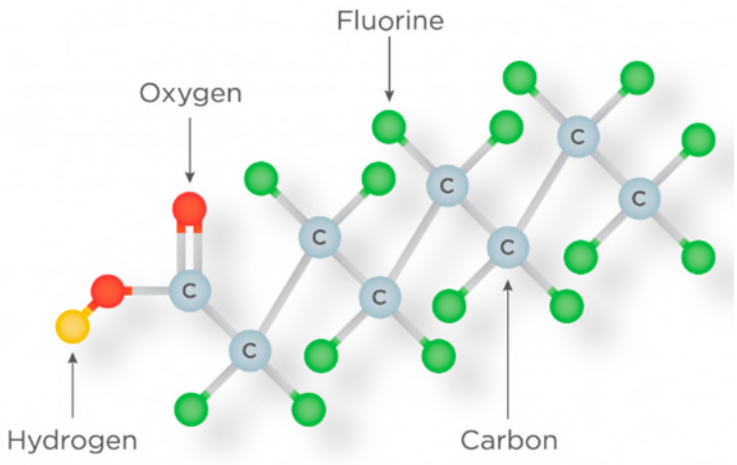
What are PFAS?

- **Per- and poly-fluoroalkyl substances (PFAS)**
- Used in a wide range of consumer and industrial products
- Approximately 650 different kinds of PFAS are currently used in commerce
- Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) are two of the most widely used and studied chemicals in the PFAS group

CALFEE

Photo credit: https://www.westonsolutions.com/news/the-problem-of-pfas-in-drinking-water-and-the-very-latest-you-need-to-know-this-water-quality-month/

Characteristics of PFAS



- The "**forever chemical**" - unique properties that prevent their complete breakdown in the environment
- Resistant to grease, oil, water and heat
- Can bioaccumulate in people, animals, and the environment over time

CALFEE

Photo credit: https://www.awwa.org/Resources-Tools/Resource-Topics/PFAS

PFAS Uses and Applications

- In use since the 1940s
- Still in use today in a variety of consumer products and industrial applications, including:
  - Aqueous firefighting foams (AFFF)
  - Stain- and water-resistant fabrics
  - Non-stick cookware
  - Carpeting
  - Cleaning products
  - Paint

- Certain PFAS are authorized by the FDA for use in cookware, food packaging, and food processing equipment

CALFEE

Photo credit: https://www.tn.gov/environment/policy/pfas.html

Where can PFAS be found?

- Water, soil, air, and food as well as in materials found in our homes or workplaces, including:
  - Drinking water
  - Soil and water near waste sites
  - Fire extinguishing foam
  - Manufacturing or production facilities
  - Food and food packaging
  - Household products
  - Personal care products
  - Biosolids

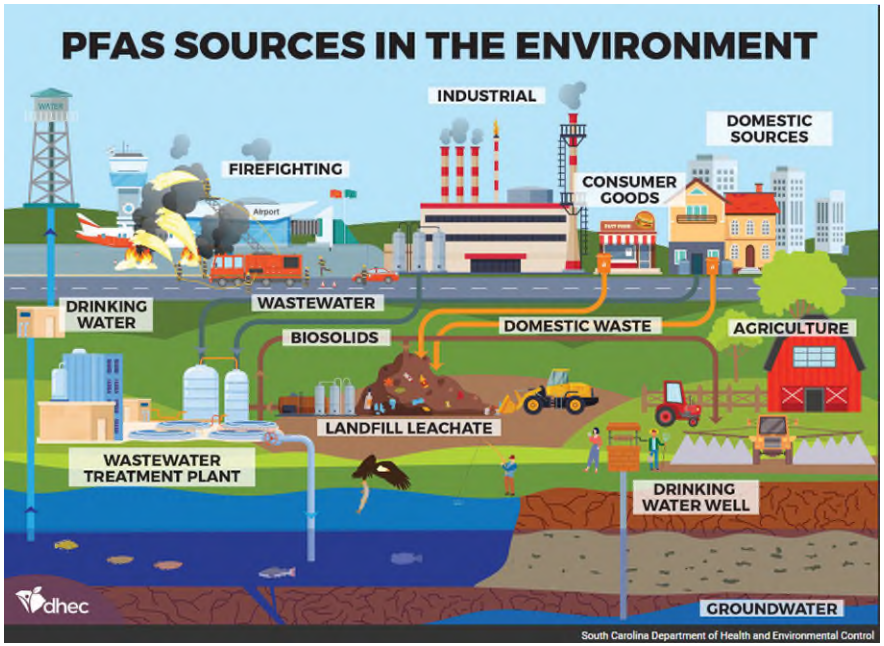
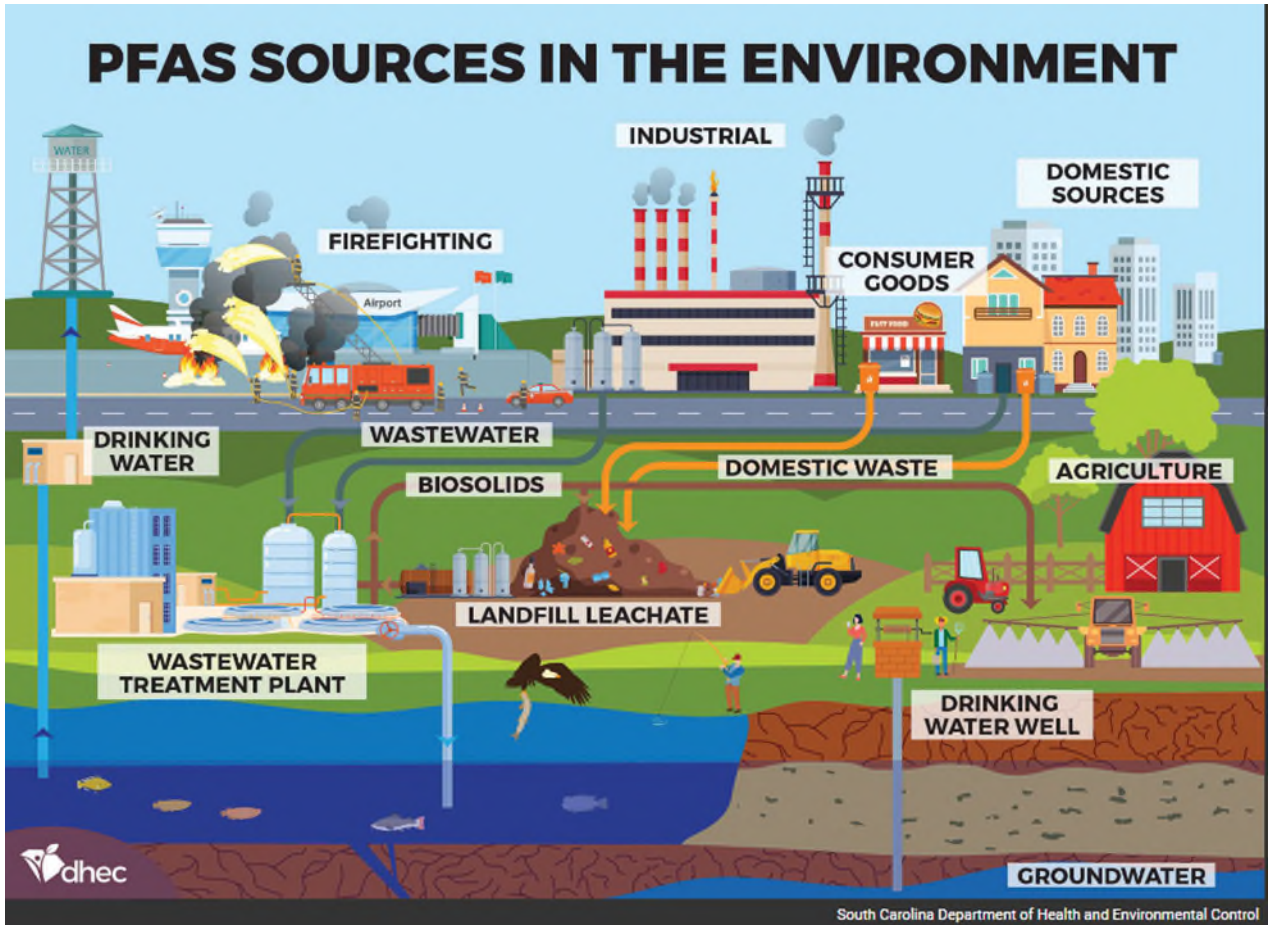


Photo credit: https://www.rubbernews.com/pfas/pfas-old-substance-requiring-new-definition

Where can PFAS be found?



CALFEE

Photo credit: https://www.rubbernews.com/pfas/pfas-old-substance-requiring-new-definition

Why are we concerned about PFAS?

- Duration and breadth of use
- Remain intact and accumulate in the environment and human bodies
- Wide-range of exposure pathways
- Exposure may lead to:
  - Reproductive effects such as decreased fertility
  - Developmental effects or delays
  - Increased risk of cancer
  - Reduced immune system
  - Hormone interference
  - Increased cholesterol levels

CALFEE

Photo credit: https://www.rubbernews.com/pfas/pfas-old-substance-requiring-new-definition

U.S. Federal Regulations and Legislation

- Historically limited to non-enforcement mechanisms
- In April 2021, EPA established the EPA Council on PFAS
- In October 2021, EPA released the **PFAS Strategic Roadmap: 2021-2024**
  - Sets forth EPA's strategy for tackling PFAS problem
  - Three primary objectives:
    - **Research** – Understand PFAS exposures and toxicities
    - **Restrict** – Proactively prevent PFAS from entering environment
    - **Remediate** – Accelerate cleanup of existing PFAS contamination

U.S. Federal Regulations and Legislation

Multi-Disciplinary Approach to PFAS Problem

- Chemical Safety and Pollution Prevention
- Water
- Land and Emergency Management
- Air and Radiation
- Research and Development
- Cross-Program

U.S. Federal Regulations and Legislation - Chemical Safety and Pollution Prevention

- Significant Milestones:
  - National PFAS Testing Strategy released October 2021
  - "Closed door" on Inactive PFAS
    - In January 2023, EPA proposed TSCA Significant New Uses Rule (SNUR)
    - Approximately 300 PFAS deemed "inactive"
    - Persons would be required to provide a "Significant New Use Notice" to reactivate the PFAS listing
    - Final SNUR expected by December 2023
  - Toxic Substances Control Act (TSCA) New Chemicals
    - Proposed updates issued May 2023
    - PFAS ineligible for low volume or low release and exposure exemptions
  - Enhance Reporting Under Toxic Release Inventory (TRI)
    - Proposed rule published in December 2022
    - Expand scope of TRI PFAS reporting
    - Add to list of Lower Thresholds for Chemicals of Special Concern

U.S. Federal Regulations and Legislation - Water

- Significant Milestones:
  - Nationwide Monitoring for PFAS in drinking water (SDWA)
    - Final rule published December 2021
    - All public water systems serving 3,300 people or more to collect samples during a 12-month period from Jan 2023 through December 2025
  - National Primary Drinking Water Regulation for PFOA and PFOS
    - Proposed rule published March 2023
    - Applies to six (6) PFOS including PFOA, PFOS, PFNA, GenX Chemicals, PFHxS, and PFBS
    - Establish legally enforceable levels, called Maximum Contaminant Levels (MCLs), for these six PFAS in drinking water
    - Also proposing health-based, non-enforceable Maximum Contaminant Level Goals (MCLGs) for these six PFAS
    - EPA anticipates finalizing the regulation by the end of 2023

U.S. Federal Regulations and Legislation - Water

EPA's Proposed Action for the PFAS NPDWR

Compound	Proposed MCLG	Proposed MCL (enforceable levels)
PFOA	0 ppt*	4.0 ppt*
PFOS	0 ppt*	4.0 ppt*
PFNA		
PFHxS	1.0 (unitless) Hazard Index	1.0 (unitless) Hazard Index
PFBS		
HFPO-DA (commonly referred to as GenX Chemicals)		

The Hazard Index is a tool used to evaluate potential health risks from exposure to chemical mixtures.

*ppt = parts per trillion (also expressed as ng/L)

Compound	Proposed HBWC (ppt)
PFHxS	9.0
PFNA	10
PFBS	2000
HFPO-DA (commonly referred to as GenX Chemicals)	10

CALFEE

Photo credit: https://www.epa.gov/system/files/documents/2023-04/PFAS%20NPDWR%20Public%20Presentation_Full%20Technical%20Presentation_3.29.23_Final.pdf

U.S. Federal Regulations and Legislation - Land and Emergency Management

- Significant Milestones:
  - Proposal to designate certain PFAS as CERCLA Hazardous Substances
    - Proposed rule published September 2022
    - Would designate two PFAS substances (PFOS and PFOA) as “hazardous substances” under CERCLA
    - Much easier to establish liability for PFAS release under CERCLA’s strict liability regime
    - Could lead to the designation of entirely new CERCLA/Superfund Sites
    - Creates risks for those already operating facilities on PFAS-contaminated sites
    - Advanced Notice of Proposed Rulemaking in April 2023 – expanding upon proposed rule to include seven (7) additional PFAS
  - Issued updated guidance on destroying and disposing of certain PFAS and PFAS-containing materials under RCRA – October 2021
    - Adding four PFAS chemicals as RCRA Hazardous Constituents

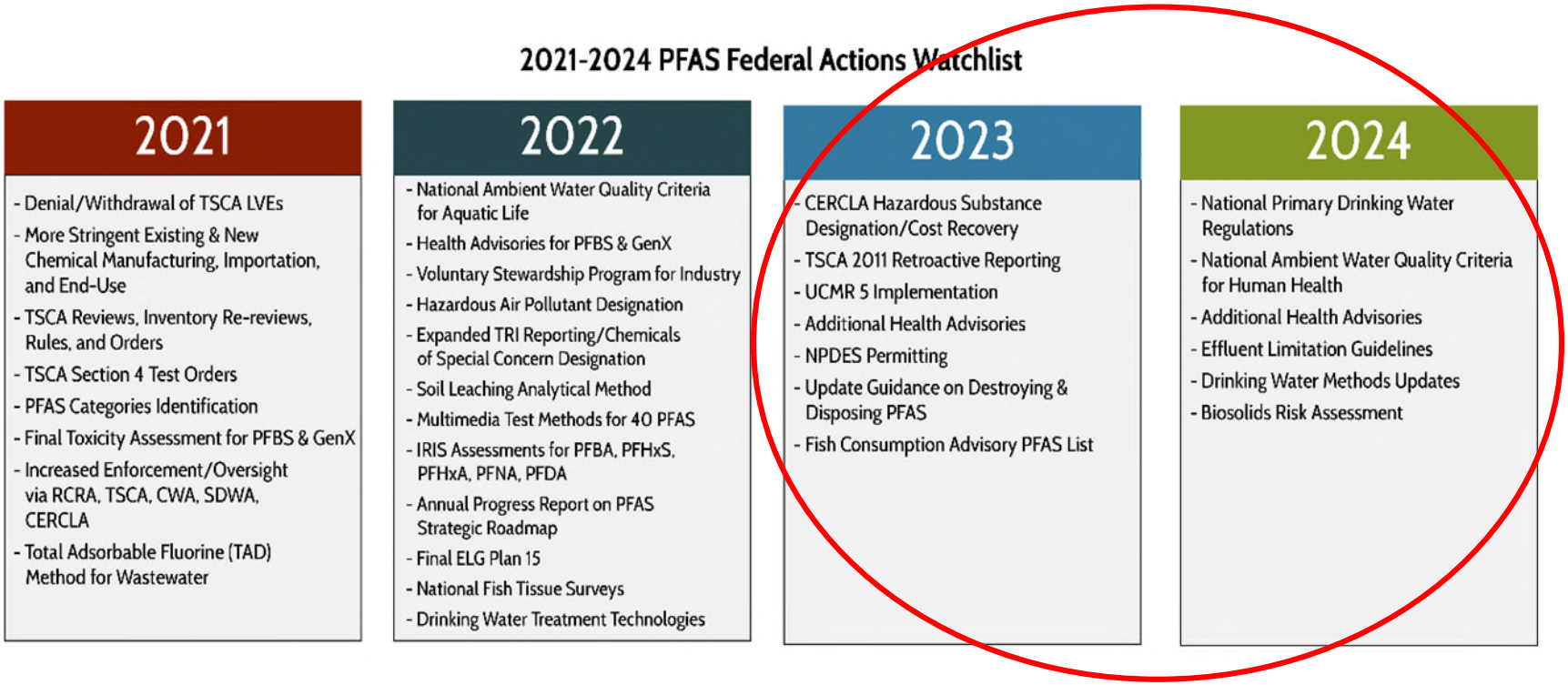
U.S. Federal Regulations and Legislation -
Air and Radiation, Research and Development, and Cross Program

- **Office of Air and Radiation** – building foundation to address PFAS air emissions.

- **Office of Research and Development**
  - Develop and validate methods to detect and measure PFAS in the environment.
  - Advance the science to assess human health and environmental risks from PFAS
  - Evaluate and develop technologies for reducing PFAS in the environment.

- **Cross-Program**
  - Engage directly with affected communities
  - Accelerate public health protections by identifying PFAS categories
  - Use enforcement tools to identify and address releases
  - Establish PFAS Voluntary Stewardship Program
  - Educate public about risks .
  - Issue annual public report on progress towards PFAS commitments.

U.S. Federal Regulations and Legislation



U.S. Federal Regulations and Legislation - PFAS Legislation

- In June 2023, U.S. Senators Tom Carper (D-Del.) and Shelley Moore Capito (R-W.Va.) released draft legislation related to the improved mitigation and remediation of PFAS contamination. If enacted, the new law would:
  - Set a September 30, 2024 deadline for EPA to complete the drinking water standards rulemaking process
  - Support the ability of states to inventory industrial users of PFAS
  - Authorize grant programs for the development of treatment technologies for PFAS
  - Create a prize competition to encourage innovation related to PFAS mitigation and remediation
  - Provide a consistent and practical definition of PFAS
  - Direct EPA to work with an external standards-setting organization
  - Amend Safe Drinking Water Act State Response to Contaminants program
  - Authorize new emergency response program

State Regulation of PFAS

Regulatory Limits and Trends Across the U.S.

CALFEE

Overview of State Regulatory Landscape

- Drinking Water
- Soil and Groundwater Remediation/Cleanup
- Hazardous Waste
- Commercial and Consumer Products

State Drinking Water Regulations

- Many states have started regulating PFAS compounds, typically in the form of maximum contaminant levels ("MCLs"), guidance levels, and notification levels.
- The most common substances regulated now are perfluorooctane sulfonic acid ("PFOS") and perfluorooctanic acid ("PFOA") but others, such as PFNA, PFHxS, PFBS, PFBA and GenX, are also being targeted.

CALFEE

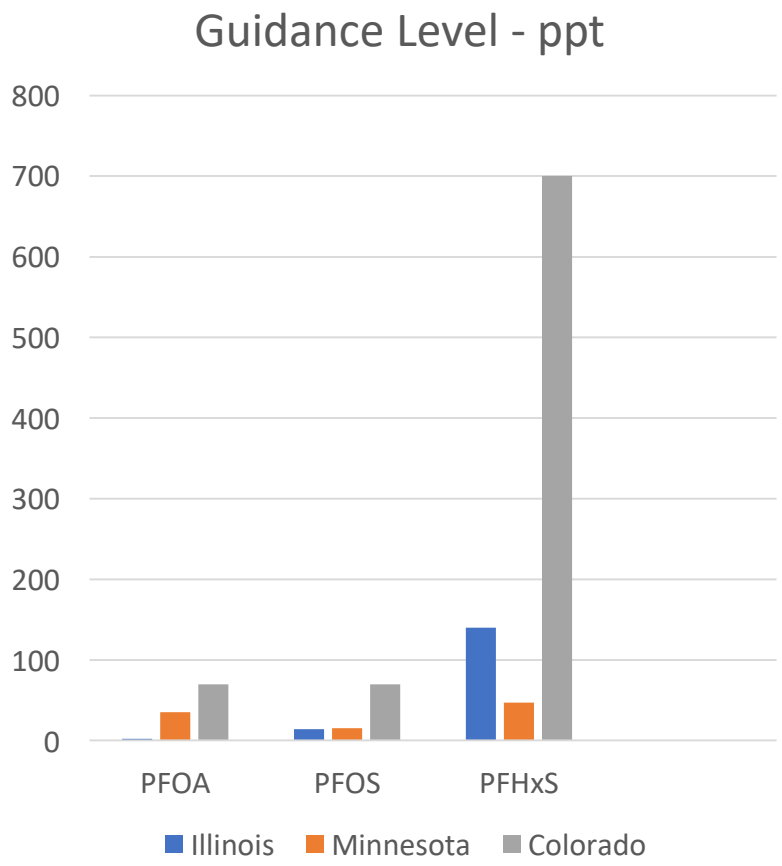
Photo credit: https://nicholas.duke.edu/news/not-all-home-drinking-water-filters-completely-remove-toxic-pfas

Ten States Have Set MCLs for PFAS in Drinking Water

- **Michigan**: 6 ppt to 400,000 ppt (range for 7 PFAS substances)
- **New York**: 10 ppt for PFOA and PFAS combined
- **New Hampshire**: 11 ppt to 18 ppt for 4 individual PFAS substances
- **New Jersey**: 13 ppt for PFNA/FFOS and 14 ppt for PFOA
- **Pennsylvania**: 14 ppt for PFOA and 18 ppt for PFOS
- **Maine**: 20 ppt for 6 PFAS substances combined
- **Massachusetts**: 20 ppt for 6 PFAS substances combined
- **Vermont:** 20 ppt for 5 PFAS substances combined
- **Rhode Island**: 20 ppt for 6 PFAS substances combined
- **Wisconsin**: 70 ppt for PFOA and PFOS combined

CALFEE

States Regulating PFAS at Guidance Level



Illinois
2 ppt to 560,000 ppt (range for 5 PFAS substances)

Minnesota
15 ppt to 7,000 ppt (range for 5 PFAS substances)

Oregon
30 ppt for 4 PFAS substances combined

Colorado
70 ppt for 3 PFAS substances combined

Maryland
140 ppt for PFHxS

North Carolina
140 ppt for GenX or HFPO-DA

Nevada
667,000 ppt for PFPA and PFOS

CALFEE

State Regulation of PFAS at Notification Level

- California
- Washington
- Ohio
- Connecticut
- Montana
- Alaska
- Delaware
- New Mexico

CALFEE

No Current PFAS Regulations – 23 States

- Arizona, Arkansas, Florida, Georgia, Hawaii, Idaho, Indiana, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Nebraska, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia and Wyoming
- Iowa: currently sampling

CALFEE

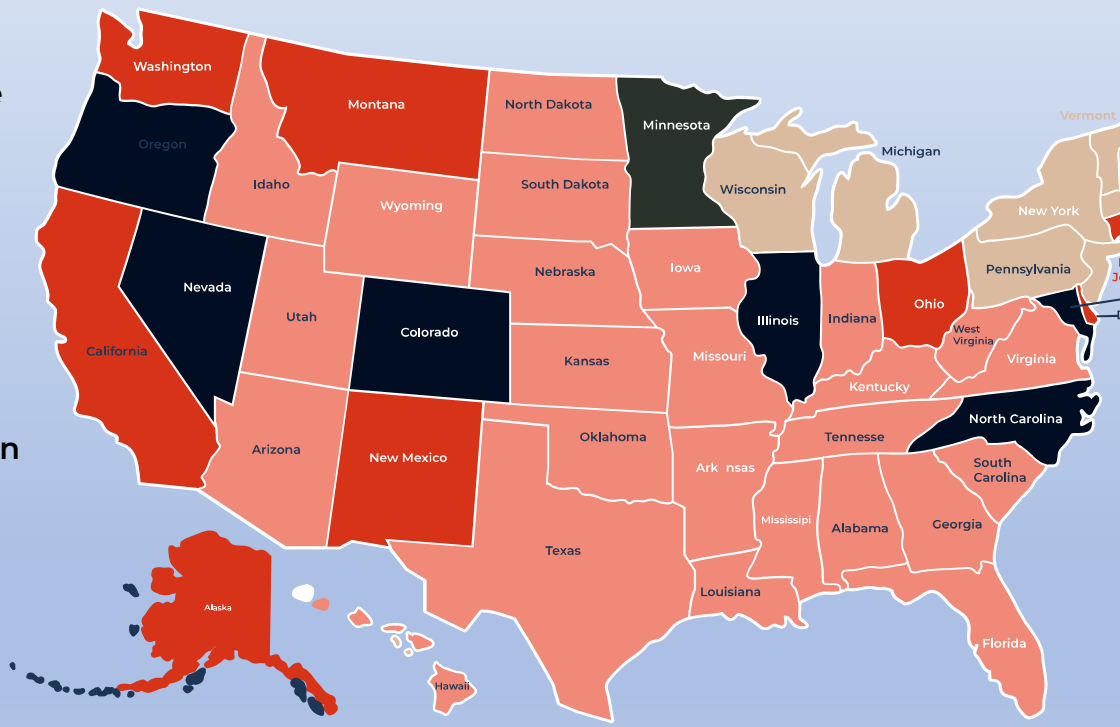
PFAS Drinking Water Regulations

01

Guidance

02

Notification



03

MCL

04

No regulation

CALFEE

Impact of National Primary Drinking Water Regulation on States

- **NPWDR**: Would set a nationwide, health-protective level for six PFAS in drinking water (PFOA, PFOS, PFHxS, PFNA, PFBS and GenX chemicals).

- **For now**: Communities and water systems should follow applicable state requirements, recognizing that EPA's proposed rule does not currently require water systems to take any action.

- When the final NPDWR goes into effect, states will be required to have a standard **that is no less strict** that the NPDWR – as SDWA requires.
- States will have two years to develop regulations after the rule is final.
  - PFOA and PFOS: **4 ppt MCL** (other four have an MCL based on a Hazard Index calculation)

  Of the 10 states with current MCLs: none would meet the proposed 4 ppt

CALFEE

Hazardous Substance Regulation

- Colorado
- Pennsylvania
- Delaware
- New York

Soil and Groundwater Remediation

- Groundwater Quality or Cleanup Standards (AK, IL, FL, NH, NC, NM, VT, WI, PA, Texas)
- Maine: Soil standards for leaching to groundwater; residential groundwater standard

Commercial and Consumer Products

https://riversideca.gov/press/understanding-pfas

State Consumer Product Bans

- **Food Packaging: 18 states banned or proposed bans of use of PFAS:** CA, CO, CT, GA, HI, IA, ME, MD, MA, MI, MN, NY, NC, PA, RI, VT, WA, WI
- **Children's Products: 12 states banned or proposed bans of use of PFAS:** CA, CO, GA, ME, MA, MI, MN, NY, OR, RI, VT, WA

CALFEE

https://chemtrust.org/pfas-food-packaging-faq/

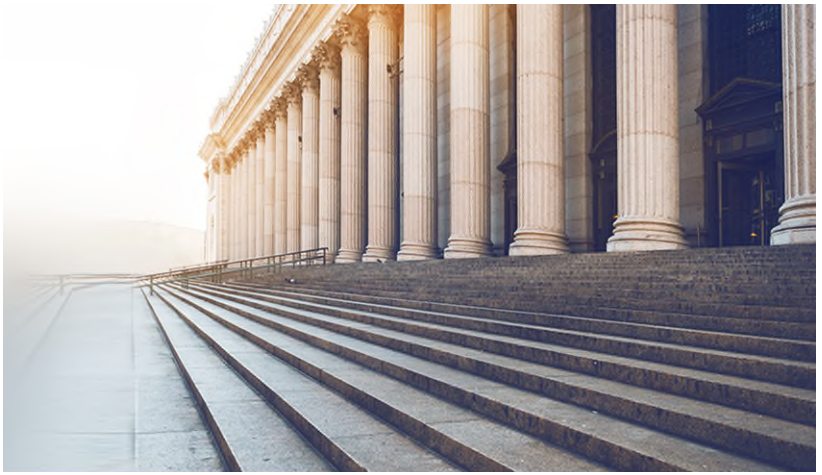
Additional State Consumer/Commercial Regulations

- Cosmetics: 6 states
- Carpets and Rugs: 10 states
- Cookware: 6 states
- Recycling: 4 states
- Textiles: 4 states
- Fabric Treatments and Apparel: 8 states
- Upholstered Furniture: 5 states
- Pesticides: 2 states
- Ski Wax: 3 states
- Composting, oil and gas products, mosquito management, cannabis packaging, feminine hygiene products, PPE, polishes
- Fish and/deer consumption: 14 states
- AFFF: 31 states (notification, use and discharge or disposal, PPE)

Litigation and Theories of Liability

- Since 2005 – over 6,400 PFAS-related lawsuits filed in federal courts. DuPont has faced over 6,000 lawsuits, and 3M was being sued on average 3 times a day in 2021.
- Initial wave: PFAS manufacturers and water utilities
- Traditional Remediation Claims (still exist): private parties seeking injunctive relief and remediation and damages to alleged land and water contamination
- New wave: negligence, trespass, nuisance and products liability, along with actions under federal and state statutes

- AFFF Multi-District Litigation in District of SC (15,000 plaintiffs)
- Government enforcement actions
  - Minnesota vs. 3M
  - California sued 18 companies
- Consumer Class Actions, including false representation claims
- Challenges to Agency rulemakings



CALFEE

Photo credit: https://www.harrisbeach.com/insights/pfas-navigating-a-new-frontier-in-environmental-regulation/

PFAS Enters the Transaction

Due Diligence

Negotiations in Transaction Documents

Post-Closing

CALFEE

Due Diligence Stage

- Phase I Environmental Site Assessments
  - Revision to ASTM standard in March 2022
- Phase II Investigations (Full and LSI)
  - Reporting obligations
  - Access agreements
  - Confidentially concerns

CALFEE

Photo credit: https://www.keramida.com/blog/what-to-expect-in-the-phase-i-esa-standard-update

What Diligence Questions to Ask?

- First, assess the target company and whether there is likely current or historical use, manufacture, sale, handling or discharge:
  - Manufacturing: Clothing and/or textile, cardboard and paper, chemical, battery, semi-conductor/capacitor, aircraft turbine, paint, carpets
  - Other industries: wire coating processes, metal plating and electroplating, photography/firm processing and production, car washes, tanneries, plastic injection molding
  - Sites where AFFF may have been used including former military bases, airports, fire stations
  - Sites near or downstream from wastewater treatment plant discharges
  - Sites at or near current or former junkyards or landfills

Diligence Questions Continued…

- How were these PFAS compounds used – in what form were they used and in what on-site processes?
- What, if any, containment, control an/or management procedures are in place?
- What does the company do with PFAS wastes?
- Have there been any spills or discharges or releases of PFAS?
- What was the mechanism of release to the environment: air emissions, discharge to surface/groundwater, dumping, incidental spillage, discharge to POTW, on-site landfilling?
- Does facility use AFFF? Has there ever been a fire requiring the use of AFFF?

Phase II Considerations: Should we test?

- Further consider potential impact before determining if additional testing for PFAS
- On-site or off-site contamination?
- State cleanup standards

CALFEE

https://www.mamavation.com/pfas-forever-chemical-consumer-studies

Negotiating the Transaction Documents

- Definitions
  - Including PFAS in “Hazardous Materials” or “Hazardous Substances”
  - Environmental Law – future federal and state regulations?
- Reps and Warranties
  - Knowledge qualifiers
  - Scheduling of known contamination
  - RWI – losses arising from exposure to (or existence of) PFAS
- Environmental Insurance
- Specific Indemnities and Releases

Post-Closing Issues

- Covenants
- Funding clean-up
- Control of Process
- Voluntary Cleanup Programs

Contact Us

Christopher Jones

- 614-621-7004
- cjones@calfee.com

Sara Blair

- 216-622-8388
- sblair@calfee.com

Christopher Ward

- 614-621-7102
- cward@calfee.com

CALFEE

This presentation is intended to inform and educate viewers about legal developments and topics and is not intended as legal advice for any specific individual or specific situation. Please consult with your attorney regarding any legal questions you may have. With regard to all content including case studies or descriptions, past outcomes do not predict future results. Updates related to any and all material are provided with the most current information made available to Calfee at the time of presentation.

CALFEE