

“Forever Chemicals”

Are you ready for the new PFAS laws?



About



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Snaplinc Consulting



About me:

30+ years in snow and outdoor industries.

Leadership roles at K2 and Outdoor Research.

Introduced hundreds of styles and millions of units to market.

Executive committee that initiated the Higg Index.

Led sustainability efforts in snow and outdoor since 2007.

Founded Snaplinc Consulting in 2018 to help the best brands manage and mitigate environmental impacts.

About Snaplinc Consulting:

Sustainability and ESG support for a range of sectors.

Strategy setting.

Environmental assessments.

Supply chain and labor due diligence.

Materials and chemicals assessments.

Sustainability compliance.



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PART 1:

Background

What are PFAS?

01

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a class of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water.

02

Exceptional water and oil repellency, low friction, thermally stable, chemically stable. Very durable structure.

03

Two main types:
Non-polymer – Usually liquid surface coatings like DWR.
Polymer – Mainly films and plastics such as GoreTex® (ePTFE) and Teflon®.

04

Approximately 10,000 individual chemicals.
C8, C6, PFOA, PFOS, PFC, PFCEC, etc. are becoming obsolete terms.
Ignore supplier terms. All of the laws say PFAS.

Where are PFAS found?

Sports and Outdoor

DWR (Durable Water Repellent)
Ski wax
GoreTex® (ePTFE) and other PTFE membranes
Water/ stain repellent treatments
Manufacturing lubricants

Everywhere

Home furnishings
Carpets and rugs
Non-stick cookware
Food packaging
Pizza boxes
Cosmetics
Shampoo
Menstrual products
Toilet paper
Dental floss



What are the issues with PFAS?

Environmental Impacts

Called “forever chemicals” since many do not break down in the environment.

Can move through soil, air and water. Very difficult to remove and filter.

Bioaccumulate in people and animals. Found in almost every living creature on earth.

PFAS Impact On Human Health

— High certainty
- - - Low certainty

Developmental Effects Affecting The Unborn Child

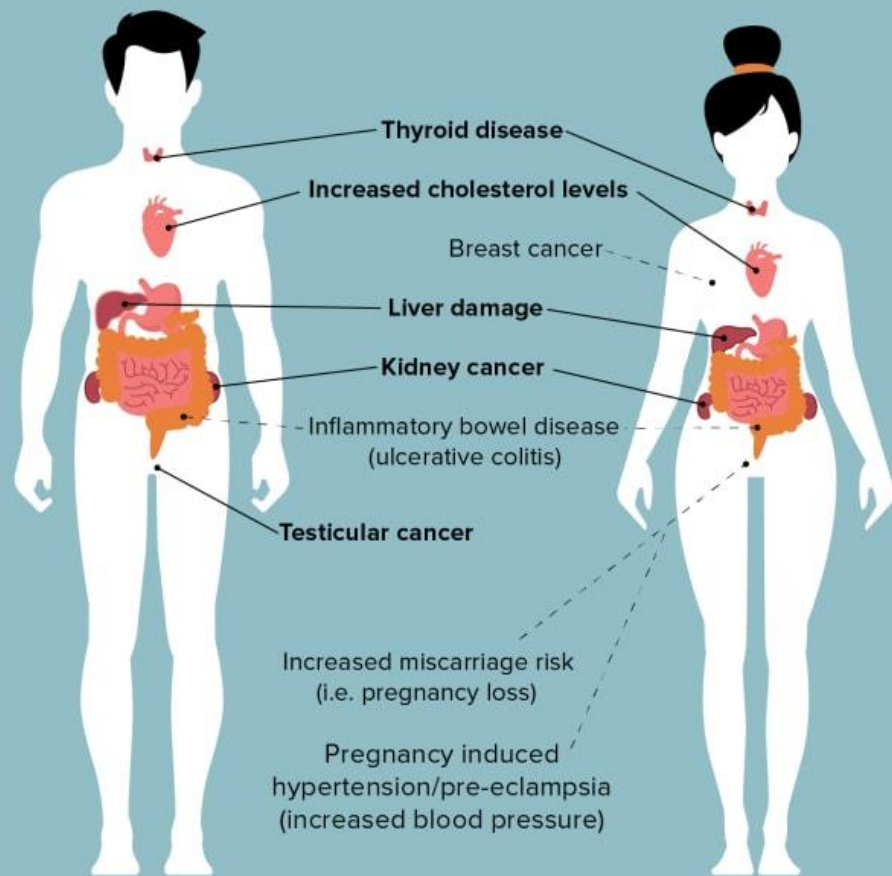
Delayed mammary gland development

Reduced response to vaccines in childhood

Lower birth weight



Source: European Environment Agency



Human Health Impacts (from EPA)

Reproductive effects such as decreased fertility or increased high blood pressure in pregnant women.

Developmental effects or delays in children, including low birth weight, accelerated puberty, bone variations, or behavioral changes.

Increased risk of some cancers, including prostate, kidney, and testicular cancers.

Reduced ability of the body's immune system to fight infections, including reduced vaccine response.

Interference with the body's natural hormones.

Increased cholesterol levels and/or risk of obesity.



PART 2:

Regulations

Regulatory Overview

Current status

Leading regulation of most common PFAS are concentrated in US states including CA, NY and ME.

US federal and EU regulations are in draft and have experienced delays, but could evolve.

Certain PFAS are banned in EU. Most common ones have bans proposed.

What do the regulations include?

They include bans, measurements, labeling and phase-outs.

Regulatory requirements most relevant to our industry begin Jan 1, 2025.

California

Prop 65

PFOA, PFOS, PFNA are included in Prop 65.

Lower rates of use, higher risk of legal exposure.

California

AB-652

January 1, 2023

Prohibition on selling or distributing juvenile products with PFAS.

"Juvenile product" means a product designed for use by infants and children under 12 years of age, including, but not limited to, a baby or toddler foam pillow, bassinet, bedside sleeper, booster seat, changing pad, child restraint system for use in motor vehicles and aircraft, co-sleeper, crib mattress, floor playmat, highchair, highchair pad, infant bouncer, infant carrier, infant seat, infant sleep positioner, infant swing, infant travel bed, infant walker, nap cot, nursing pad, nursing pillow, playmat, playpen, play yard, polyurethane foam mat, pad, or pillow, portable foam nap mat, portable infant sleeper, portable hook-on chair, soft-sided portable crib, stroller, and toddler mattress.

California

AB-1817

January 1, 2025 prohibits manufacture, distribution, selling or offering for sale textile articles with PFAS.

Textile articles “include, but are not limited to, apparel, accessories, handbags, backpacks...”

Does not apply to “outdoor apparel for severe wet conditions” until January 1, 2028.

Does require these products to be labeled as “Made with PFAS chemicals” including in online listings.

***“Outdoor apparel”** means clothing items intended primarily for outdoor activities, **including**, but not limited to, hiking, camping, **skiing**, climbing, bicycling, and fishing.*

***“Outdoor apparel for severe wet conditions”** means outdoor apparel that are extreme and extended use products designed for outdoor sports experts for applications that provide protection against extended exposure to extreme rain conditions or against extended immersion in water or wet conditions, such as from **snow**, in order to protect the health and safety of the user and that are not marketed for general consumer use. Examples of extreme and extended use products include outerwear for offshore fishing, offshore sailing, whitewater kayaking, and mountaineering.*

Brands must provide certificates of compliance to retailers signed by an authorized official and can be electronic.

A distributor or retailer of a textile article, if they are not also the manufacturer of the product, shall not be held in violation of this chapter if they relied in good faith on the certificate of compliance provided by the manufacturer.

New York S1322

January 1, 2025 prohibits manufacture, distribution, selling or offering for sale apparel with PFAS.

Penalties are \$1000 per day for 1st violation and \$2000 per day for 2nd violation.

Does not apply to “outdoor apparel for severe wet conditions” until January 1, 2028.

Does require these products to be labeled as “Made with PFAS chemicals” including in online listings.

***“Outdoor apparel”** means clothing items intended primarily for outdoor activities, **including**, but not limited to, hiking, camping, **skiing**, climbing, bicycling, and fishing.*

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Brands must provide certificates of compliance to retailers signed by an authorized official and can be electronic.

No person that sells or offers for sale any apparel or outdoor apparel for severe wet conditions shall be held in violation of this section if they can show that they relied in good faith on the written assurance of the manufacturer...

Maine

H.P. 1113 – L.D. 1503

H.P. 138 – L.D. 217

Delayed to January 1, 2025.

All products covered.

Measurement and reporting required.

Most challenging compliance.

Total ban 2030.

Exemption for manufacturers that employ 25 or fewer people.

Requires detailed reporting on all products that contain PFAS:

- Description of product.
- Estimate of total unit sales in Maine or nationally.
- Purpose of PFAS.
- Amount of each PFAS identified by Chemical Abstracts Service Registry Number (CAS RN).
- Reported as an exact quantity or reported as Total Organic Fluorine (TOF).

The amount of each of the PFAS, identified by its chemical abstracts service registry number or in the absence of this number a description approved by the department, in the product, reported as an exact quantity, or as the amount of total organic fluorine if the amount of each PFAS compound is not known, determined using commercially available analytical methods or based on information provided by a supplier as falling within a range approved for reporting purposes by the department;

Colorado

HB 22-1345

January 1, 2024

Ban on “juvenile products” with PFAS

Ban on fabric treatments with PFAS

"Juvenile product" means a product designed for use by infants or children under twelve years of age.

"Juvenile product" includes: bassinets and other bedside sleepers, booster seats, car seats, and other child restraint systems, changing pads, co-sleepers, crib or toddler mattresses, floor play mats, highchairs and highchair pads, infant bouncers, infant carriers, infant or toddler foam pillows, infant seats, infant sleep positioners, infant swings, infant travel beds, infant walkers, nap cots, nursing pads and pillows, play mats, playpens, play yards, polyurethane foam mats, pads, or pillows, portable foam nap mats, portable infant sleepers and hook-on chairs, soft-sided portable cribs, strollers.

Vermont

18 V.S.A. § 1692

July 1, 2023

Ban on sale of ski wax with PFAS

Does not address pre-waxed products

Penalties

Civil actions allowed but not specified



Minnesota

H.F.No. 2310

January 1, 2025

Ban on sale of ski wax, fabric treatments and juvenile products with PFAS

Does not address pre-waxed products

January 1, 2026

Similar to Maine; all products covered.

Measurement and reporting required.

Total ban 2032.



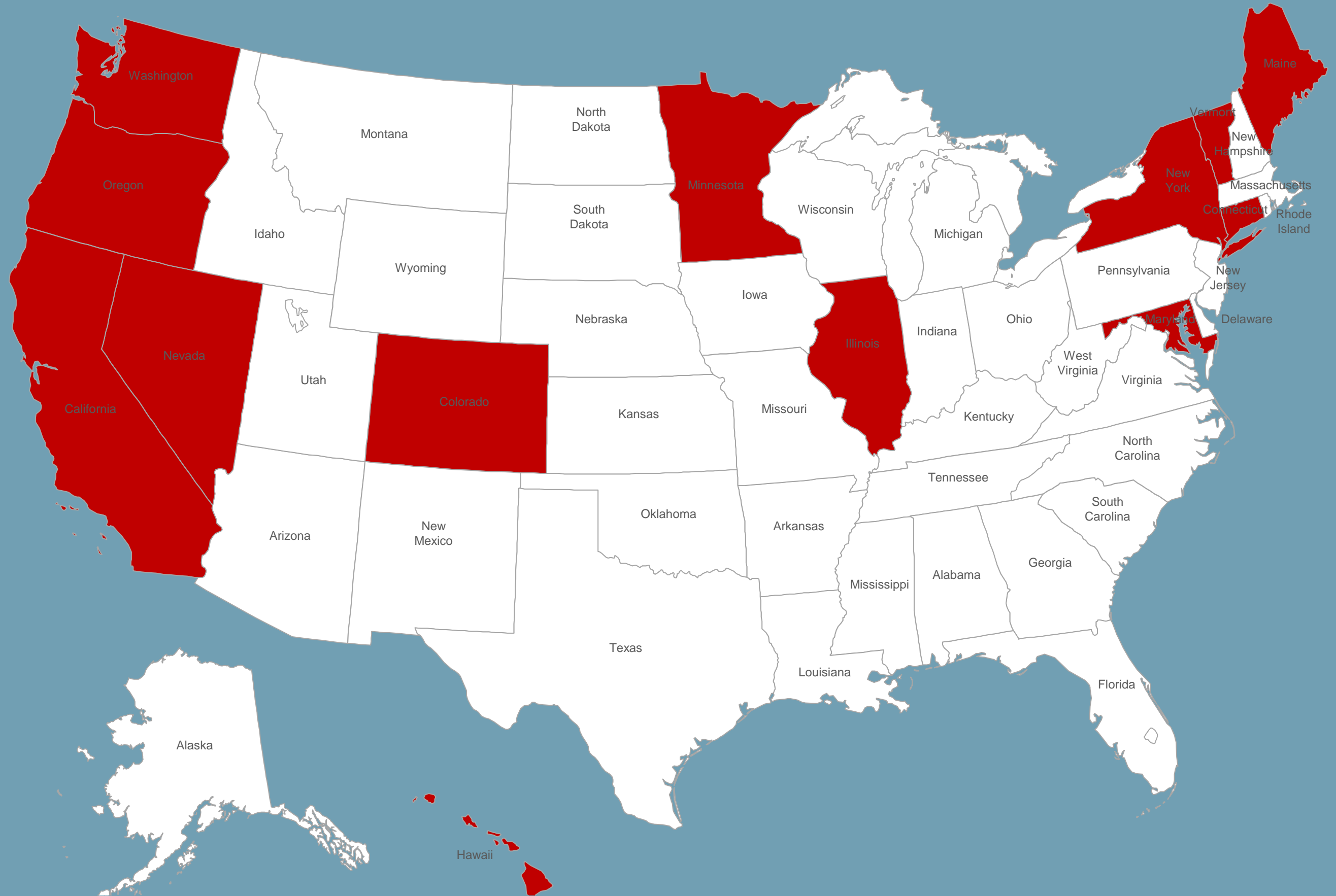
Overview of States

Washington

Illinois

Nevada

And many more...



Europe

Certain PFAS are banned:

Use of these has been reducing in high end textiles.

Some are found in ski wax.

PFOA, PFOS, C8, C9-C14.

11 Additional PFAS are part of REACH:

Should be included in REACH screening.

Use of these has been reducing in high end textiles.

Proposed complete ban 2026:

Significant lobbying has created uncertainty.

Many US restrictions will be in place prior to this date.





PART 3:

Compliance

Retailer Compliance

If you are a retailer:

If you sell products in CA or NY:

Develop a compliance program to collect Certificates of Compliance.

If you have a website that sells to CA, ensure that terminology is compliant.

If you produce private label/ private brand products:

Confirm that they comply in all areas in which they are sold.

If you are a brand:

Key retailers are reducing exposure and have sent out inquiries to brands.

Well written laws have created backpressure from retailers to brands.

REI, Backcountry, Dick's and others have sent out PFAS inquiries.

REI has stated their plans for final acceptance of items with PFAS.

As more retailers become aware, expect the volume of communication to increase.

Expect queries during F/W 24/25 sell in and be ready with answers.



Steps to start now

Supply chain inquiry and evaluation

Use findings to determine which products contain PFAS.

Begin locating suitable alternatives.

Testing

Develop statistically valid surveillance testing program.

Select correct tests.

CA and NY - Total Organic Fluorine (TOF) as a screening tool, not required.

Maine - Complex calculations that require knowing amount of PFAS and amount of each material used in every product.

Phase out

Very few pathways to continue using PFAS.

Labeling

Label outdoor apparel for severe wet conditions as appropriate.

Inventory management

Manage on first in/ first out (FIFO) basis.

Manage web D2C locations.

Clearance

Opportunities for clearance via specific channels and in specific locations.





PART 4:

What's Next?

People, Planet, Product

Leadership

As business leaders who care about these issues we have an opportunity to protect people and planet.

Communicate to factories and material suppliers.

Communicate to employees.

Communicate to B2B customers.

Communicate to consumers.

Product performance

Partnerships - Aftermarket product providers are ready and eager to support.

Marketing - Tell a more active story of product care and repair on web, hangtags, etc.

Management - Develop a plan to support routine retreatment of DWR.

This **IS** the new normal.



PART 5:

Q&A

Thank you!

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