



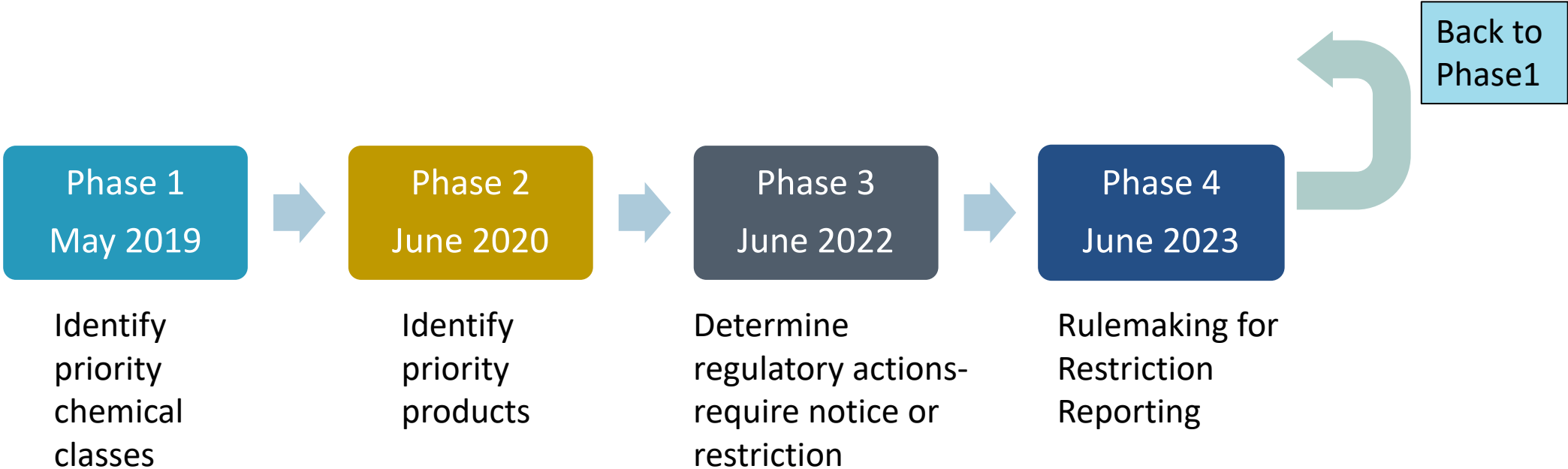
ALTERNATIVES TO PFAS UNDER SAFER PRODUCTS FOR WASHINGTON



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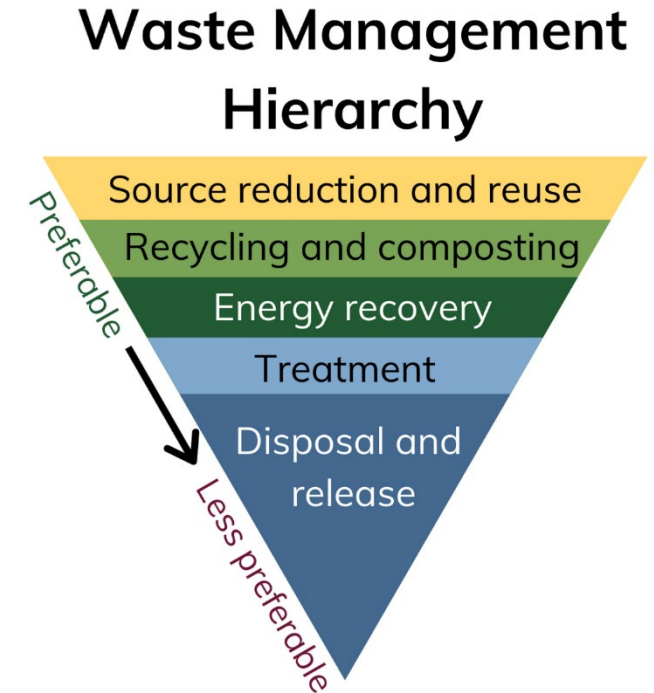
Safer Products for Washington

- Safer Products for Washington is the implementation program for RCW 70A.350 and includes DOH consulting with Ecology.
- Four phases over five years in a repeating cycle



Safer Products for Washington

- Aims to reduce exposures to priority chemicals in consumer products.
- Reduce risk by avoiding the use of hazardous chemicals
- Chemical class approach to avoid regrettable substitutes
 - Group chemicals by chemistry, functions, sources, or hazards
 - Data gaps are considered potentially hazardous
 - Help address cumulative risk
- Alternatives assessment
- Intentionally added includes the final product or manufacturing. It does not include the use of recycled materials



No data ≠ No hazard

Current Safer Products for Washington Phases

- Cycle 1: Rule adopted May 2023 173-337 WAC
- Cycle 1.5 Phase 3: Regulatory Determinations on PFAS Products
 - 2022 amendment to the law RCW 70A.350
 - Identified firefighter gear as a priority product
 - Other priority products from PFAS Chemical Action Plan
 - Phase 3 by June 2024, Phase 4 by Dec. 2025
- Cycle 2 Phase 1: Priority Chemical Report June 2024



**Draft Regulatory Determinations
Report to the Legislature:**

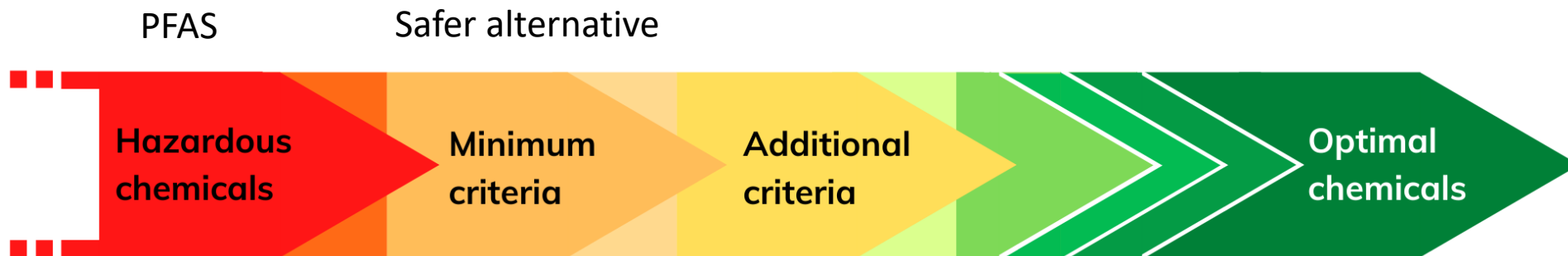
**Safer Products for Washington
Cycle 1.5 Implementation Phase 3**

Regulatory Determinations in Phase 3

- Three options
 - No action
 - Require reporting
 - Restriction
 - **Safer** alternatives are **feasible and available**, and
 - The restriction will either reduce a significant source or use of a priority chemical or is necessary to protect the health of sensitive populations or sensitive species.
- SFA is not
 - PFAS-free
 - Banned in another state

Safer

- Safer is defined in the law as “less hazardous to humans or the environment than the existing chemical or process.”
- A safer alternative may include a
 - Alternative chemical or
 - Alternative product or process that eliminates the need for the chemical
- Criteria for safer is a spectrum and divided into bins



Minimum criteria for safer

- Based on Globally Harmonized System (GHS)
- Chemicals used to function like priority chemicals cannot have:
 - High for carcinogenicity, mutagenicity, reproductive or developmental toxicity, or endocrine disruption.
 - High toxicity for other endpoints and very persistent and/or very bioaccumulative.
 - Very high persistence and very high bioaccumulation.

Examples of certifications that meet our minimum criteria for safer

● Chemical

- EPA Safer Chemical Ingredients List chemicals evaluated against the master criteria and some functional criteria
- GreenScreen® Benchmark 2, 3 and 4
- ChemFORWARD A, B, and C
- Scivera GHS+ Green, Green/Yellow, Yellow

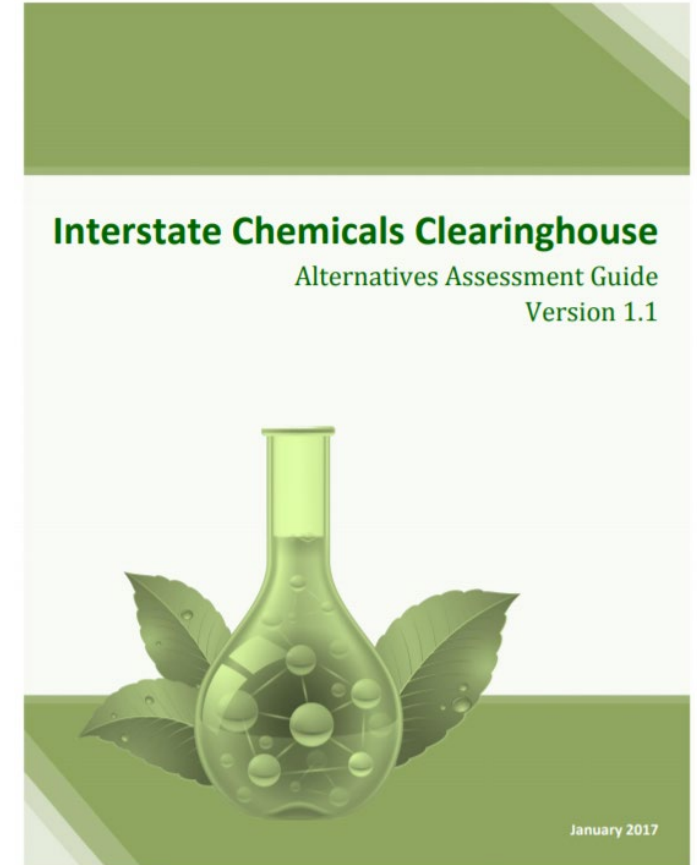
● Products

- GreenScreen Certified™ Gold and Silver Products.
- EPA Safer Choice Products with ingredients evaluated against the master criteria.
- Cradle to Cradle Certified™ Silver, Gold, and Platinum Material Health Certificate products. * Additional documentation of persistence and bioaccumulation may be necessary

Feasible and available

Feasible and available and are not defined in the statute.

1. Define function
 2. Is the priority chemical necessary?
- Feasible
 - **Already used** or marketed for the application of interest or a similar application
 - Identified as feasible by an authoritative body
 - Available
 - **Already used** for the application of interest
 - Offered for sale at a price that is close to the current



Cycle 1 Regulations for PFAS

Product	Regulatory Action	SFA Alternative examples	Date
Carpets and Rugs	Restriction	<ul style="list-style-type: none"> • Untreated carpets and rugs- Polypropylene, nylon • Safer treatments- Acrylate copolymer, Eco-Ensure • Cleanable with Safer Choice 	Jan 1, 2025
Furniture and furnishings intended for indoor use	Restriction	<ul style="list-style-type: none"> • Inherently stain-resistant- polyethylene, polypropylene, wool • Cleanable with Safer Choice detergents 	Jan 1, 2026
Aftermarket stain and water resistance treatments	Restriction	<ul style="list-style-type: none"> • Safer treatments- Nikwax, Otter wax • Cleanable with Safer Choice 	Jan 1, 2025
Furniture and furnishings intended for outdoor use	Reporting requirement	Insufficient SFA identified	Start collecting data Jan. 1, 2024. Report by Jan. 31, 2025.

Cycle 1.5 Draft Regulations for PFAS

Product	Draft Regulatory Action	SFA alternative
Apparel and gear	Restriction	Alternative weaves- Helly Hansen Untreated w/ Safer Choice cleaning- everyday wear Protective garments- apron
*Shoes, gear, extended use	Reporting requirement	Not identified
Firefighter PPE	Reporting requirement	Not identified
Cleaning products	Restriction	Safer surfactants in multiple types of products
Waxes and polishes- auto, floor, ski	Reporting requirement	Insufficient SFA identified Beeswax, paraffin waxes Nikwax ski wax with limited use Flooring that doesn't require wax or polish
Hard surface sealants	Reporting requirement	Did not evaluate
Cookware	Reporting requirement	Did not evaluate

Example Cleaning Products

- Household and institutional cleaners that are all-purpose as well as for glass, bathrooms, dishes, tiles, and cars.
- PFAS functions as a surfactant
- Identified 13 surfactants that meet minimum criteria for safer (Table 6)
 - EPA SCIL, GreenScreen BM-2, Scivera GHS+ Yellow
- Identified products that contain safer surfactants across different cleaning products (Table 7)
- Specific examples of currently available products (Table 8)



Example Apparel and Gear

- Apparel includes:
 - Athleticwear
 - Rain wear
 - Everyday clothes
 - Menstrual underwear
 - Shoes
- Gear includes:
 - Backpacks
 - Sleeping bags
 - Umbrellas
 - Camping furniture
 - Climbing rope
- Extended use products (based on CA/NY laws) 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, to protect the health and safety of the user and that are not marketed for general consumer use.
- Firefighter PPE is separate
- Other occupational PPE is excluded from scope



Example Apparel and Gear

Table 3

Function	Material alternatives	Cleaning methods alternatives	Protective clothing alternatives
Water repellency	Examples include jackets, ski pants, shell pants, shoes, gloves.	Not applicable	Not applicable
Oil repellency and stain or soil resistance	Not applicable	Examples include washing products with Safer Choice detergents, professional wet cleaning.	Examples include Coveralls or Aprons- for painting, working with oil etc.
Barrier	Menstrual underwear	Not applicable	Not applicable

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Additional WA laws on PFAS in products

Product	Regulatory Action	Dates
Cosmetics (2023)	Restriction	Jan. 1, 2025
Food packaging (2018)	Restriction	Feb. 2023 and May 2024 Req Alt Asses and SFA determination
Fire fighting foam (2018)	Restriction	July 1, 2018
Children's Safe Products Act (2008)	Reporting requirement includes PFOS, PFOA	Reporting started 2012



Priority Chemicals

- Cycle 1 defined in law (2019)
 - PFAS
 - Phthalates, in vinyl flooring and fragrances used in personal care products
 - Organohalogen flame retardants and certain others, in electronics and foam
 - Phenolic compounds, laundry detergent food cans, and receipts
 - PCBs in printing inks
- Cycle 2 Draft has gotten public comments (final report due Jun 2024)
 - Lead and lead compounds
 - Cadmium and cadmium compounds
 - Brominated and/or chlorinated substances
 - Benzene, ethyl benzene, toluene, and xylene (BTEX) substances
 - Formaldehyde and formaldehyde releasers
 - Cyclic volatile methylsiloxanes
 - 6PPD

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