DEPARTMENT OF ECOLOGY
State of Washington

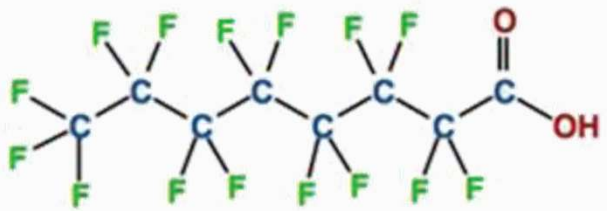
PFAS Regulatory Efforts in WA

Bri Brinkman, Ph.D. | Toxics Cleanup Program (TCP)
Northwest Remediation Conference | 2 May 2024

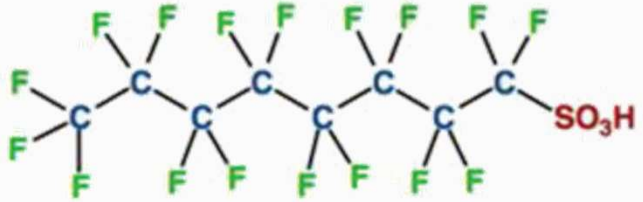
What are PFAS?

PFAS = Per- and polyFluoroAlkyl Substances

- Over 12,000+ human-made chemicals
- Ubiquitous in products
  - Non-stick Cookware
  - Water-proof apparel
  - Fast food wrappers
  - Firefighting foam
- PFOA and PFOS most common



PFOA - perfluorooctanoic acid



PFOS - perfluorooctanesulfonic acid

PFAS Regulation Timeline

Dec 2019
EPA interim recommendation of 70 ppt

Oct 2021
PFAS listed hazardous substances under MTCA

Jan 2022
DOH State Action Levels (SALs)

July 2022
Screening and Clean-up Levels

June 2023
Guidance for PFAS document

2019 | 2020 | 2021 | 2022 | 2023 | 2024

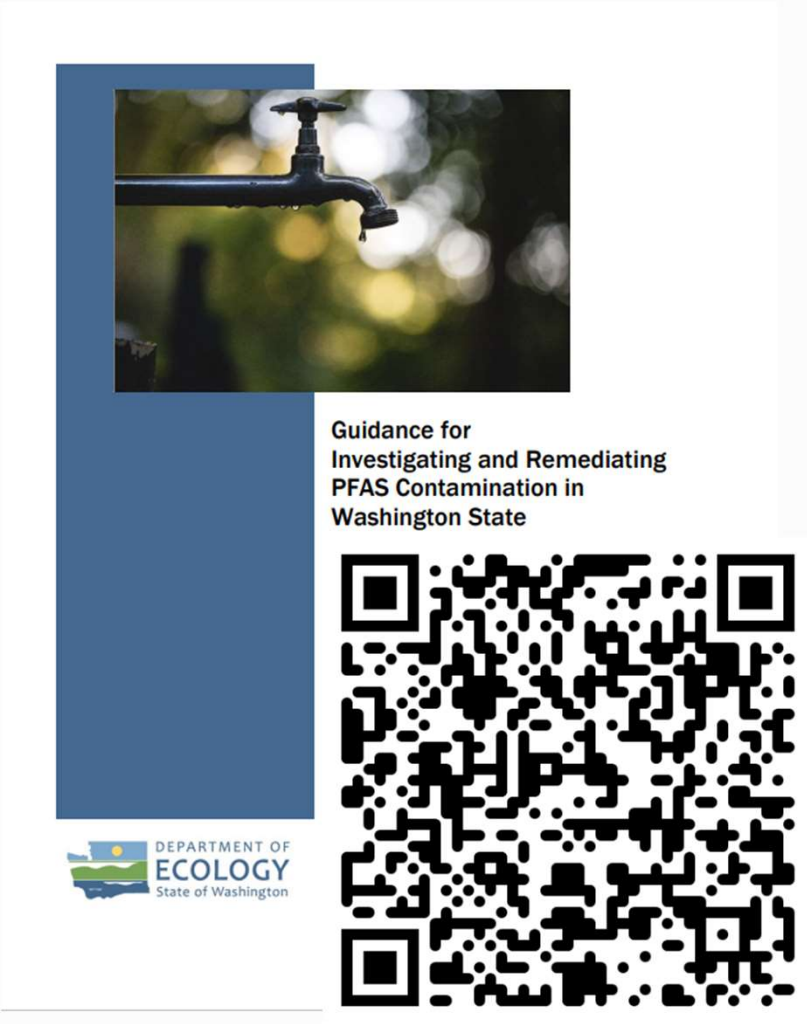
June 2022
EPA Updates Health Advisory

Aug 2023
EPA rescinds interim recommendation

April 2024
EPA promulgated MCLs and designated PFOS/PFOA as hazardous

Guidance for PFAS

- Analytical methods
- Minimizing cross-contamination
- Human health soil and groundwater cleanup levels
- Ecological screening levels
- Remedial technologies



PFAS Guidance Screening & Cleanup Levels

Media	Human Health 8 PFAS	Ecological 10 PFAS
Soil	Yes Table 4	Yes Table 6
Groundwater	Yes Table 5	Not applicable
Surface Water	Yes Table 6 (defer to ecological)	Yes Table 6
Sediment	In process 2025 SCUM	In process 2025 SCUM
Air	To be determined	Not applicable

Groundwater Cleanup Levels

PFAS	TCP Method B Groundwater (ng/L)	WDOH SAL (ng/L)	TCP Preliminary Groundwater Cleanup Level (ng/L)
PFOA	48	10	10
PFOS	48	15	15
PFNA	40	9	9
PFHxS	160	65	65
PFBS	4,800	345	345
PFBA	8,000	None	8,000
PFHxA	8,000	None	8,000
HFPO-DA (GenX)	24	None	24

TCP PFAS Guidance – Table 3

EPA MCLs (Human Health)

- Announced April 10th, Final rule effective June 25, 2024

Chemical	2024 EPA Maximum Contaminant Levels (MCLs)
PFOA	4 ppt
PFOS	4 ppt
PFNA	10 ppt
PFHxS	10 ppt
HFPO-DA (GenX chemicals)*	10 ppt
Mixture of two or more: PFNA, PFHxS, HFPO-DA, and PFBS	Hazard Index of 1

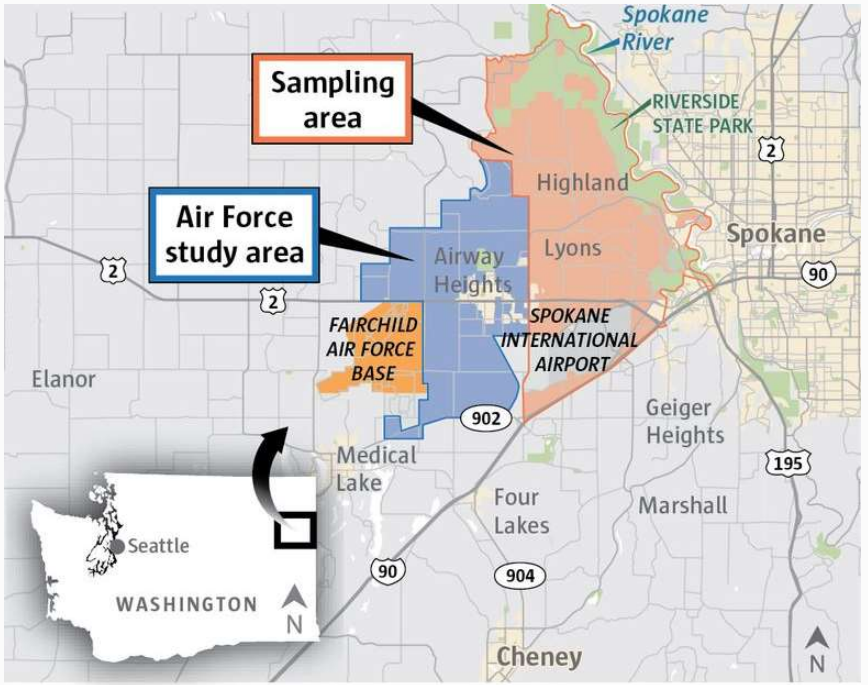
* GenX chemicals have not been found in Washington state.

What is Ecology doing?

- PFAS releases are required to be reported
  - Method to evaluate PFAS
  - Tracking PFAS sites
  - Dealing with PFAS spills
  - Addressing PFAS impacted drinking water
  - Including PFAS as contaminants of potential concern (COPC) when suspected
- PFAS in sediments – 2025 SCUM
  - Site-specific levels for human health direct contact available now
- New screening and cleanup levels as new toxicity information is available for additional PFAS
- Update existing screening and cleanup levels as new toxicity information is available

Focus: West Plains PFAS

- Ecology requested that EPA support drinking water sampling in the Northeast West Plains to:
  - Determine which private wells users are being exposed to PFAS
  - Inform understanding of PFAS in the West Plains
- Interagency cooperation with local citizens' groups



Thank you

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PFAS Analytical Methods

Method	PFAS	Matrix	Analytical Instruments	Quantitation Scheme	Status
USEPA 537.1 *	18	Finished drinking water	LC/MS/MS	Internal standard	Final
USEPA 533	25	Finished drinking water	LC/MS/MS	Isotope dilution	Final
USEPA 8327	24	Ground water, surface water, wastewater	LC/MS/MS	External standard	Final
USEPA 1633	40	Aqueous, soil, biosolid, sediment, tissue	LC/MS/MS	Isotopically labeled standards	Final

* Method 537.1 Has been modified by the labs for solids analysis