

## PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) IN DRINKING WATER



Washington State Department of Health  
Office of Drinking Water

## PFAS in the News

**Whidbey Island drinking-water wells polluted with firefighting chemicals near Navy airstrips**

Originally published March 3, 2017 at 6:00 am | Updated March 4, 2017 at 6:00 pm

**Neighbors of Fairchild Air Force Base sue makers of toxic fire retardant, including 3M Co.**

UPDATED: Wed, April 11, 2018

**FAIRCHILD AIR FORCE BASE**

Fairchild partners with Airway Heights to provide water to residents affected by water advisory

30th Air Refueling Wing Public Affairs | Published May 10, 2017

**THE NEWS TRIBUNE**

**3 JBLM wells shut after unacceptable levels of chemicals found in the water**

By Adam Lynn MARCH 02, 2017 04:00 PM

## Potential Sources of PFAS in Drinking Water

- Aqueous film-forming foams (AFFF): (military sites, fire training centers, AFFF spill sites, civilian airports)
- Manufacturing plants, industrial use sites, waste water treatment plants, land fills.



## Initial PFAS Testing in WA Unregulated Contaminant Monitoring Rule 2013-2015

Public Water System	Population	Combined PFOA & PFOS (ppt)	EPA Lifetime Health Advisory PFOA & PFOS (ppt)
Issaquah Water System (well #4)	26,000	<b>620 - 490*</b>	<b>70</b>
City of DuPont Water System	11,500	30	
JBLM (Fort Lewis)	75,000	51	

*\*This well was blended with another well without PFAS before delivery to homes. Drinking water at the taps was estimated to be  $\leq 100$  ppt PFOA+PFOS.*

## Scope of UCMR in WA

- Only six PFAS compounds included
- 132/4,000 Group A Systems were sampled
  - All 113 systems that serve > 10,000 people
  - 19 small systems that serve ≤ 10,000 people
  - Represents 94% of people on public water
    - (~80% of the state population)



Photo credit: Aliton, C. HDR, *The ABCs of PFCS in Water Supplies*

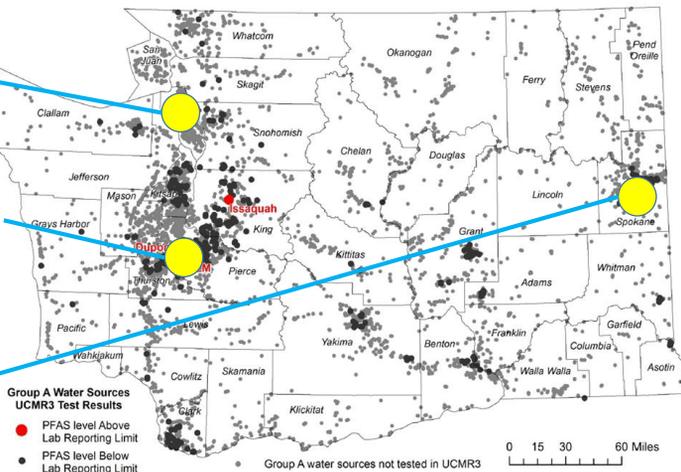
WA State DOH | 5

## Military Conducting Voluntary PFAS Testing Nationwide Near Fire Training Areas (2016—Present)

Whidbey Naval Air Station

Joint Base Lewis McChord

Fairchild Air Force Base



WA State DOH | 6

**PFAS Chemical Action  
Plan (CAP)  
Advisory Committee**

WA State DOH | 7

## Statewide Chemical Action Plan for PFAS Draft Recommendations

-  **Ensure safe drinking water**
-  **Manage environmental contamination**
-  **Reduce PFAS in products**
-  **Understand and manage PFAS in waste**

WA State DOH | 8

## Washington State Action

2014	2016	2017	2018	2019
UCMR data: PFAS in some Washington systems	EPA issues Lifetime HAL for PFOS & PFOA	WSBoH begins PFAS rule making	ECY/DOH issues interim CAP	ECY/DOH implement new laws & CAP
	ECY & DOH begin work on PFAS Chemical Action Plan (CAP)	ECY begins work on PFAS clean up standard	WA State passes bills restricting PFAS in AFFF, food packaging	DOH seeks input on draft drinking water rule

| 9

## Highlights of Legislative Action

### Washington Examiner

Washington becomes first state to ban nonstick chemicals in food packaging

by Anna Giaritelli | April 10, 2018 12:00 AM



Democratic Gov. Jay Inslee in March signed a bill into law that will phase out perfluorinated and polyfluorinated substances such as popcorn bags and burger wrappers. (AP photo)



### THE SPOKESMAN-REVIEW

(Spokane, Washington) Est. 1888 (P.S.)

Washington bans firefighting chemicals that may cause cancer

Updated on March 27, 2018



Water that may be contaminated with chemicals used in firefighting team on Fairchild Air Force Base is flushed from a fire hydrant in Airway Heights last December. Washington is banning those chemicals for civilian fire departments, although it has no authority to extend the ban to military bases. (Celia Matney - The Spokesman-Review)

## State Board of Health: Rulemaking

1. Petition to set state PFAS drinking water standards
2. SBOH accepted petition Oct 2017
3. Considerations
  - ✓ SAL vs. MCL
  - ✓ Which PFAS to include?
  - ✓ Action levels?
  - ✓ Addressing PFAS mixtures



WA State DOH | 11

## State Board of Health: Rulemaking

Activity	Anticipated Completion Date	Date Completed
SBOH Decision To Consider Rulemaking	October 2017	<b>October 2017</b>
File CR-101 <a href="#">WSR 18-01-080</a>	December 2017	<b>December 15, 2017</b>
Update SBOH	June 2018	<b>June 2018</b>
Update SBOH	August 2018	<b>August 2018</b>
Draft Rule Language	September 2018 To June 2019	<b>June 2019</b>
Finalize Draft Rule Language and Begin Drafting Significant Analysis	September 2019	<b>October 2019</b>
Update SBOH	November 2019	
Stakeholder Comment Period—Workshops In Spokane, Mount Vernon, and Tacoma	December 2019	
Finalize Draft Rule Language and Finalize Significant Analysis	February 2020	
Update SBOH—Briefing	April 2020	
File CR-102 Proposed Rulemaking	May 2020	
Public Hearing	June 10, 2020	
Prepare Concise Explanatory Statement	July 2020	
File CR-103 Rulemaking Order	July 2020	
Rule Effective	August 2020	

For detailed information about the process, contact Theresa Phillips at 360-236-3147 or

[theresa.phillips@doh.wa.gov](mailto:theresa.phillips@doh.wa.gov).

[doh.wa.gov/Portals/1/Documents/4200/PFAS-Timeline.pdf](https://doh.wa.gov/Portals/1/Documents/4200/PFAS-Timeline.pdf)

WA State DOH | 12

## SALs are Health Protective Levels

A level in water expected to be without appreciable health effects over a lifetime of exposure, this includes sensitive groups.



WA State DOH | 13

## *Draft* SALs for PFAS in Drinking Water

Contaminant	SAL (parts per trillion)
<b>PFOA</b>	<b>10</b>
<b>PFOS</b>	<b>15</b>
<b>PFNA</b>	<b>14</b>
<b>PFHxS</b>	<b>70</b>
<b>PFBS</b>	<b>1,300</b>

WA State DOH | 14

## **Future Needs**

- Coordinated approach to PFAS contamination
- Funding for treating contaminated drinking water
- Non-PFAS options for fire fighting foam on military bases
- Coordination with Ecology on cleanup standards
- Ecology grants

WA State DOH | 15

## **Contact Information**

Office of Drinking Water

360-236-3100

[odw.mail@doh.wa.gov](mailto:odw.mail@doh.wa.gov)

WA State DOH | 16

