

Air Force PFOS/PFOA Snapshot

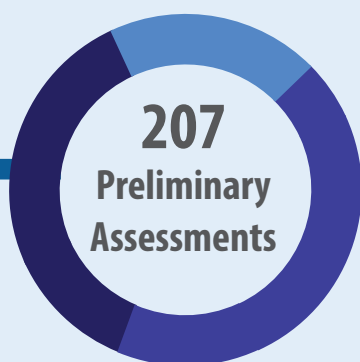
Perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) are synthetic fluorinated organic chemicals used in many industrial and consumer products such as nonstick cookware, stain-resistant fabric and carpet, some food packaging and specialized foam.

Commonly grouped with other synthetic fluorinated chemicals using the umbrella term Perfluorinated Compounds — or PFCs — PFOS and PFOA are the only two compounds with established health advisories for drinking water.

Significant Dates

- In 1970, the Air Force began using the firefighting agent Aqueous Film Forming Foam, or AFFF, which contains both PFOS and PFOA.
- AFFF is the most efficient extinguishing method for petroleum-based fires and is widely used across the firefighting industry, to include all commercial airports, to protect people and property.
- On May 19, 2016, the Environmental Protection Agency established lifetime health advisory levels of 70 parts per trillion for PFOS and PFOA in drinking water. Both compounds are classified as emerging contaminants due to evolving regulatory standards.

IDENTIFY



39 BRAC

94 Active Duty/Reserve

74 Air National Guard



194 PAs Complete

\$137.7M

PFOS/PFOA Actions to date

190 Bases

Requiring Further Site Inspection

RESPOND

20
bases

Air Force Drinking Water Mitigation Options:

- Water treatment systems
- Bottled water
- Alternate well hookup
- Home filters

BRAC

March
Mather
Pease
Plattsburgh
Wurtsmith

ACTIVE/RESERVE

Dover
Eielson
Ellsworth
JB Cape Cod
JB McGuire-Dix-Lakehurst
Mountain Home
New Boston
Peterson
Wright-Patterson

ANG

Gabreski
Horsham
Martinsburg
New Castle
Stewart
Toledo

PREVENT

173

Bases out of 177
have received
new C6 AFFF

89%

Bases have
transitioned to
new C6 AFFF

143,590

Gallons of legacy
AFFF out of an
estimated 617,350
have been disposed



\$4.7M

Cost for ecologic
system kits for
fire vehicles

\$8.1M

Cost to date to replace
and dispose of legacy
AFFF in stockpiles and
fire trucks



Installations Status Update

1. Former Chanute AFB

- No drinking water wells impacted; treat leachate discharge to wastewater treatment plant

2. Dover AFB

- SI results from Dec. 2015 show one home exceeds HA—bottled water provided

3. Eielson AFB

- Sampling results in Apr. 2015 found PFOS/PFOA in on-base drinking wells
- Plume is off-base; drinking water being provided to 212 residents; 93 pending

4. Ellsworth AFB

- Alternate water provisions pending; undetermined number of affected wells

5. Gabreski ANG

- Alternate water provisions pending

6. Horsham ANG

- Received Administrative Order under Safe Drinking Water Act (SDWA); currently providing alternate water sources to surrounding townships

7. JB Cape Cod

- Private wells affected; providing bottled water for 16 off-base residents; alternate water source in consideration

8. JB McGuire-Dix-Lakehurst

- Providing bottled drinking water and water treatment systems; continuing sampling

9. Former March ARB

- Providing alternate water source for two residents; one municipal well shut down

10. Martinsburg ANG

- Big Springs municipal well above HA; well taken offline
- Working on Cooperative Agreement with city

11. Former Mather AFB

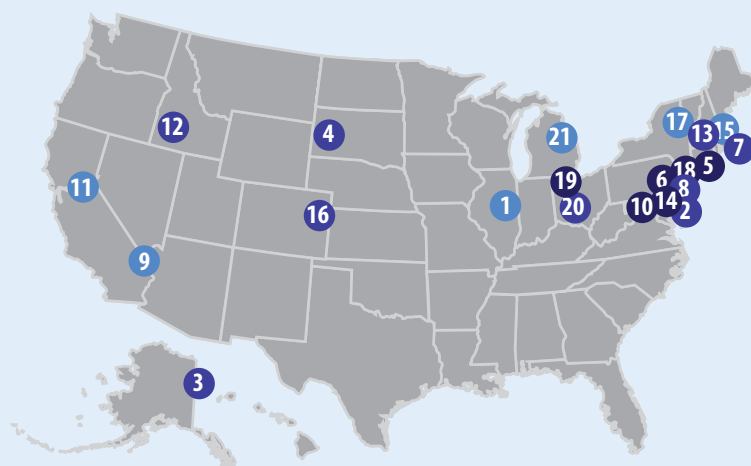
- Carbon treatment was added to remove high levels of PFOS/PFOA from the effluent of an existing pump and treatment system that re-injects treated water near private wells

12. Mountain Home AFB

- Two wells shut off; bottled water provided to affected users

13. New Boston AFS

- PFOS/PFOA above HA detected in one of four wells; no drinking water exposure



14. New Castle ANG

- City of New Castle and Artesia Water wells affected
- Sampled 25 monitoring wells with PFOS/PFOA detected; awaiting EPA Region 3 and DNREC next steps

15. Former Pease AFB

- One public well shut down until treatment system is operational; treatment systems installed at 4 private wells

16. Peterson AFB

- Addressing local water systems concerns; considering alternate water provisions

17. Former Plattsburgh AFB

- Treatment systems installed at three private wells
- 40 private drinking water wells have been tested

18. Stewart ANG

- State of New York has paid to have the city of Newburgh connected to the New York City Aqueduct. The state has also begun the design of a carbon filtration plant for Newburgh

19. Toledo ANG

- One private well above HA; another private well detected but below HA
- Well owner provided bottled water by ANG

20. Wright-Patterson AFB

- Wells 8 and 9 shut off; additional sampling and monitoring

21. Former Wurtsmith AFB

- One of 55 private wells impacted – Air Force connected to a municipal water supply
- Preventing further PFOS/PFOA contamination of Clarks Marsh and the Au Sable River, protecting aquatic life and minimizing the affected area of a do not eat fish order.