

Air Force PFOS/PFOA Snapshot

Perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) are synthetic fluorinated organic chemicals that were 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 of this group with established Environmental Protection Agency health advisories for drinking water.

Significant Information

- In 1970, the Air Force began using the firefighting agent Aqueous Film Forming Foam, or AFFF, which contained 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 a lifetime health advisory (LHA) level of 70 parts per trillion for PFOS and/or PFOA in drinking water. The health advisory is non-regulatory and not enforceable; however, under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) the Air Force uses it to determine an acceptable level of PFOS/PFOA in drinking water.

IDENTIFY



39 BRAC
90 Active Duty/Reserve
74 Air National Guard

99%
Preliminary Assessment
Reports Complete

190 Installations

Expected to Require Further Site Inspection

RESPOND



Ongoing Air Force Drinking Water Mitigation:

- Bottled water
- Whole-house filtration
- Municipal water supply hookup
- Alternate water supplies

\$210M

PFOS/PFOA Actions to date
investigations | mitigations

BRAC

K.I. Sawyer
March
Pease
Plattsburgh
Wurtsmith
Reese

ACTIVE/RESERVE

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

ANG

Horsham
Toledo
Gabreski

PREVENT

174/176

Installations
transitioned to new
C6 AFFF

\$4.7M

Cost for ecologic
system kits for fire
vehicles

36%

Installations finished
retrofitting vehicles
with ecologic system
kits



979,000

Gallons of legacy
AFFF incinerated

\$10.8M

Cost to date to replace
and incinerate legacy
AFFF in stockpiles and
fire trucks

Installations Status Update

On-base Drinking Water Mitigation

1. Mountain Home AFB, ID

Two on-base drinking water wells above LHA; wells taken offline and bottled water provided

2. New Boston AFS, NH

One on-base drinking water well above LHA; filtration system installed

3. Wright-Patterson AFB, OH

Two on-base drinking water wells above LHA; wells taken offline and filtration systems installed

Off-base Drinking Water Mitigation

4. Dover AFB, DE

One off-base residential well above LHA; filtration system provided

5. Ellsworth AFB, SD

One off-base residential well above LHA; connected to base water supply

6. Fairchild AFB, WA

Two municipal wells above LHA; wells taken offline. 79 off-base residential wells above LHA; bottled water provided

7. Former K.I. Sawyer AFB, MI

One residential well above LHA; bottled water provided

8. Former March ARB, CA

Two off-base residential wells above LHA; providing alternate drinking water source; 1 municipal well shut off

9. Former Pease AFB, NH

One public well shut off; filtration systems installed at 4 residences; 1 residence provided bottled water

10. Former Plattsburgh AFB, NY

Three off-base residences provided filtration systems; 1 off-base residence provided bottled water

11. Former Wurtsmith AFB, MI

One off-base residence connected to municipal water supply

12. Gabreski ANGB, NY

County wells above LHA; 1 residential well above LHA; ANG providing bottled water from the city to the residence

13. JB Cape Cod, MA

8 residential wells and 1 public water supply well above LHA; 8 off-base residences provided bottled water, 9 filtration systems installed, 102 municipal water connections completed

14. Peterson AFB, CO

42 municipal wells above LHA; wells taken offline, 6 back on line with treatment systems. 29 off-base locations provided bottled water; 37 private wells above LHA; 26 residences provided filtration systems; 1 location hooked to municipal water supply

15. Toledo ANG, OH

One off-base residential well above LHA; ANG provided bottled water and working with county on a cooperative agreement to hook residence up to municipal water

16. Former Reese AFB, TX

48 residential wells above LHA and/or Texas Commission on Environmental Quality Tier I Residential Protective Concentration Limits; bottled water provided

Both On-base and Off-base Drinking Water Mitigation

17. Horsham ANG, PA

Under Administrative Order. Two on-base drinking water wells above LHA; temporary carbon filtration installed and bottled water provided. 59 off-base private wells and 5 municipal wells above LHA. Currently providing alternate water sources to surrounding townships while carbon filtration systems are constructed

18. Eielson AFB, AK

On-base drinking water well taken offline. 170 off-base wells above LHA; 164 filtration systems installed, remaining residences provided bottle water

19. JB McGuire-Dix-Lakehurst, NJ

Two on-base backup wells above LHA; wells taken offline. 4 off-base wells above LHA; 3 filtration systems installed, 1 residence provided bottled water. Evaluating connection to municipal water lines as permanent solution

Other Drinking Water and Non-drinking Water Mitigation

20. Barnes ANGB, MA

Two municipal wells above LHA; wells taken offline. One private well above LHA for which state is providing alternate water source; 2 other off-base residences below LHA but state is providing alternate water source for those 2 residences

25. Former Mather AFB, CA

Non-drinking water: effluent from pump and treat system being treated prior to re-injection near private wells

21. Burlington ANG, VT

Non-drinking water (agricultural) water leachate at off-site private well above LHA; state installed carbon filtration treatment

26. New Castle ANG, DE

14 public wells above LHA. Municipality installed carbon filtration systems on 10 wells. Installation of filtration systems in progress at 2 wells; further testing underway at 2 additional wells

22. Former Chanute AFB, IL

Non-drinking water: leachate being treated for discharge to wastewater treatment plant

27. Stewart ANG, NY

City of Newburgh drinking water reservoir above LHA; alternate water provided through New York State aqueduct. State funded public drinking water filtration system for Newburgh under construction

23. Joe Foss Field, SD

10 public wells above LHA; alternate water supply provided by other public wells

28. Harrisburg IAP, PA

Municipal supplier delivered water with elevated PFOS in 2014; the supplier mitigated the problem and conducted periodic monitoring. The current wells utilized and drinking water are currently below the LHA.

24. Martinsburg ANG, WV

One municipal well above LHA taken offline