

# 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.

PFOS and PFOA are part of a family of synthetic fluorinated chemicals called per- and polyfluoroalkyl substances (PFAS). 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 (AFFF) which contained 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 EPA established a lifetime health advisory (LHA) level of 70 parts per trillion for PFOS and/or PFOA in drinking water. The LHA is non-regulatory and not enforceable; however, under the Comprehensive Environmental Response, Compensation and Liability Act the Air Force uses it to determine an acceptable level of PFOS/PFOA in drinking water.

**203** Installations Require Preliminary Assessments (PAs)

**99%\*** of PAs Complete

\*Estimated completion for last base, Joint Base Elmendorf-Richardson, Alaska is Spring 2020.

of those 203, **189** Installations Expected to Require a Site Inspection (SIs)

**60%** of SIs Complete

## IDENTIFY

**39** BRAC  
**89** Active/Reserve  
**75** ANG

**30** BRAC  
**84** Active/Reserve  
**75** ANG

## RESPOND

**21**  
Installations

### Air Force Drinking Water Mitigation:

- Bottled water
- Point-of-use filtration
- Whole-house filtration
- Municipal water supply hookup

**BRAC**  
 K.I. Sawyer  
 March  
 Mather  
 Pease  
 Plattsburgh  
 Reese  
 Wurtsmith

**ACTIVE/RESERVE**  
 Cannon  
 Dover  
 Eielson  
 Ellsworth  
 Fairchild  
 JB McGuire-Dix-Lakehurst  
 Mountain Home  
 New Boston  
 Peterson  
 Wright-Patterson

**ANG**  
 JB Cape Cod  
 Gabreski  
 Horsham  
 Toledo

## PREVENT

**176/176**  
Installations transitioned to new C6 AFFF in stockpiles and fire trucks

**\$5.3M**  
Cost for ecologic system kits for fire vehicles

**92%**  
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



**\$321M\*** total expenditure PFOS/PFOA Actions to Date investigations | mitigations | prevention  
\*through end of 1st Qtr FY19

# Installations Status Update

## On-base Air Force Drinking Water Mitigation

### Mountain Home AFB, ID

Two on-base drinking water wells above LHA; 1 filtration system installed; bottled water provided for second well

### New Boston AFS, NH

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

### Wright-Patterson AFB, OH

Two wells above LHA, filtration system installed

## Off-base Air Force Drinking Water Mitigation

### Dover AFB, DE

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

### Ellsworth AFB, SD

23 off-base residential wells above LHA; 2 locations connected to base water supply, 94 residences provided bottled water

### Fairchild AFB, WA

Two municipal wells above LHA; wells taken offline. 81 off-base residential wells above LHA. 20 filtration systems installed; remaining provided bottled water

### Former K.I. Sawyer AFB, MI

One residential well above LHA; filtration system provided

### Former March AFB, CA

One municipal well above LHA; shut off, cooperative agreement in place. 2 residential wells above LHA; connected to municipal water supply

### Former Pease AFB, NH

One municipal well above LHA; shut off, cooperative agreements in place. 5 residential wells above LHA, filtration systems installed at 4 residences, 1 residence provided bottled water

### Former Plattsburgh AFB, NY

Four residential wells above LHA; 3 filtration systems provided, 1 residence provided bottled water

### Former Wurtsmith AFB, MI

One residential well above LHA; connected to municipal water supply

### Gabreski ANGB, NY

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

### JB Cape Cod, MA

One municipal well above LHA; taken offline, wellhead treatment under construction. 3 residential wells above LHA. 3 receiving bottled water; 9 filtration systems installed, 107 municipal water connections completed

### Peterson AFB, CO

40 municipal wells above LHA; wells taken offline, 10 back on line with treatment systems. 11 off-base locations provided bottled water; 21 private wells above LHA; 27 residences provided filtration systems; 1 location connected to municipal water supply

### Toledo ANG, OH

One off-base residential well above LHA. Residence connected to municipal water supply; well closed

### Former Reese AFB, TX

196 residential wells and 3 municipal wells above the LHA and/or Texas Commission on Environmental Quality Tier 1 Residential Protective Concentration Limits; 169 filtration systems installed, remaining provided bottled water

### Cannon AFB, NM

Three off-base drinking water sources above LHA; bottled water provided

### Former Mather AFB, CA

One municipal well above LHA; Air Force to fund operation and maintenance of treatment system

## Both On-base and Off-base Air Force Drinking Water Mitigation

### Horsham ANG, PA

Under Administrative Order. Two on-base drinking water wells above LHA; temporary carbon filtration installed and bottled water provided. 61 off-base private wells and 5 municipal wells above LHA. Currently providing alternate water sources to surrounding townships while carbon filtration systems are constructed

### Eielson AFB, AK

GAC system installed at on-base water treatment plant. 170 off-base private wells above LHA; 164 water systems installed, 6 residences provided bottled water. Interim ROD for permanent remedy under regulatory review

### JB McGuire-Dix-Lakehurst, NJ

Two on-base backup wells above LHA; wells taken offline. 5 off-base wells above LHA; 3 filtration systems installed, 2 properties provided bottled water. Installing connection to municipal water as permanent solution

## Other Drinking Water Mitigation

**New Castle ANG, DE:** 14 municipal wells above LHA; all have carbon treatment installed

**Stewart ANG, NY:** City of Newburgh drinking water reservoir above LHA; alternate water provided through New York State aqueduct. State-funded public drinking water system for Newburgh construction is complete but not operating

**Joe Foss Field, SD:** 10 municipal wells above LHA; alternate water supply provided by other municipal wells

**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

**Barnes ANGB, MA:** Two municipal wells above LHA; wells taken offline. Three private wells above LHA for which state is providing alternate water source

**Martinsburg ANG, WV:** One municipal well above LHA. GAC system installed by city and functioning starting in December 2017

## Non-drinking Water Mitigation

**Burlington ANG, VT**

**Former Chanute AFB, IL**

**Former March AFB, CA**

**Former Mather AFB, CA**

**Former Pease AFB, NH**

**Stewart ANG, NY**

**Former Wurtsmith AFB, MI**

Current as of 15 February 2019