

# Air Force PFOS/PFOA Snapshot

Perfluorooctane sulfonate (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)

**88%** of SIs Complete

## IDENTIFY

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

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

## RESPOND

**23**  
Installations

### Air Force Drinking Water Response Actions:

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

### BRAC

Castle  
K.I. Sawyer  
March  
Mather  
Pease  
Plattsburgh  
Reese  
Wurtsmith

### ACTIVE/RESERVE

Cannon  
Dover  
Eielson  
Ellsworth  
Fairchild  
JBMDL  
Luke  
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

**99%**

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

\*Total expenditure for PFOS/PFOA actions to date as of end of FY19.

**\$447.5M\*** total expenditure PFOS/PFOA Actions to Date investigations | response actions | prevention



# Installations Status Update

## On-base Air Force Drinking Water Response Actions

**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 Response Actions

**Former Castle AFB, CA:** Two resident wells above LHA, bottled water provided

**JB Cape Cod, MA:** One municipal well above LHA; taken offline, wellhead treatment under construction. 2 residential wells above LHA, 1 receiving bottled water; 9 filtration systems installed; 108 municipal water connections complete

**Former K.I. Sawyer AFB, MI:** One residential well above LHA; filtration system provided

**Gabreski ANGB, NY:** County wells above LHA; 1 residential well above LHA; ANG providing bottled water from the city to the residence

**Former March AFB, CA:** One public well above LHA; shut off, cooperative agreement in place. 2 residential wells above LHA; connected to municipal water supply

**Toledo ANG, OH:** One off-base residential well above LHA. Residence connected to municipal water supply; well closed

**Former Mather AFB, CA:** One municipal well above LHA; Air Force to fund operation and maintenance of treatment system

**Cannon AFB, NM:** Three off-base drinking water sources above LHA; bottled water provided

**Former Pease AFB, NH:** Two municipal wells above LHA; 1 shut off, 1 on line with treatment system, cooperative agreements in place. 5 residential wells above LHA, filtration systems installed at 4 residences, 1 residence provided bottled water

**Dover AFB, DE:** Five off-base residential wells above LHA; filtration system installed at 1 residence, bottled water provided to remaining 4 locations

**Former Plattsburgh AFB, NY:** Four residential wells above LHA; 3 filtration systems provided, 1 residence provided bottled water

**Ellsworth AFB, SD:** 23 off-base residential wells serving 94 residences above LHA; 2 residences connected to base water supply, 2 residences connected to city water; filtration system installed at 17 residences, 73 residences provided bottled water

**Former Reese AFB, TX:** 231 residential wells and 3 municipal wells above the LHA and/or Texas Protective Concentration Limits; 213 filtration systems installed, remaining provided bottled water

**Fairchild AFB, WA:** Two municipal wells above LHA; filtration system installed. 90 off-base residential wells above LHA; 84 filtration systems installed, remaining provided bottled water

**Former Wurtsmith AFB, MI:** One residential well above LHA; connected to municipal water supply

**Luke AFB, AZ:** One off-base residential well above LHA; bottle water provided

**Peterson AFB, CO:** 42 municipal wells above LHA; wells taken offline, 10 back on line with treatment systems. 6 off-base locations provided bottled water; 21 private wells above LHA; 27 residences provided filtration systems; 1 location connected to municipal water supply; 1 Ion exchange system installed at a mobile home park

## Both On-base and Off-base Air Force Drinking Water Response Actions

**Horsham ANG, PA:** Under Administrative Order. 2 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; 165 water systems installed, 5 residences provided bottled water. AF signed interim ROD. \$43.1M cooperative agreement signed with City of North Pole to connect residents to municipal water. Construction to begin spring 2020

**JB McGuire-Dix-Lakehurst, NJ:** Two on-base backup wells above LHA; filtration system installed; new deep well and treatment building under design as permanent solution. 6 off-base wells above LHA; 3 filtration systems installed, 3 properties provided bottled water. Installing connection to municipal water as permanent solution

## Other Drinking Water Response Actions

**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

**Harrisburg IAP, PA:** Municipal supplier delivered water with elevated PFOS in 2014; the supplier responded to the problem and conducted periodic monitoring. The current wells utilized and drinking water are currently below the LHA

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

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

**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

## Non-drinking Water Response Actions

**Burlington ANG, VT**

**Stewart ANG, NY**

**Former Chanute AFB, IL**

**Former March AFB, CA**

**Former Mather AFB, CA**

**Former Pease AFB, NH**

**Former Wurtsmith AFB, MI**