

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)

87% 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. 3 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 Commission on Environmental Quality Tier 1 Residential Protective Concentration Limits; 212 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