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)

85% of SIs Complete

39 BRAC

89 Active/Reserve

IDENTIFY

75 ANG

30 BRAC

84 Active/Reserve

PREVENT

75 ANG

RESPOND



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 Luke Dover **Mountain Home** Eielson **New Boston** Ellsworth Peterson Fairchild **Wright-Patterson JBMDL**

ANG

JB Cape Cod Gabreski Horsham Toledo

176/176

Installations transitioned to new C6 AFFF in stockpiles and fire trucks

\$5.3M

Cost for ecologic system kits for fire vehicles

98%

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

\$424M

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

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

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

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

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

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

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

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; 108 municipal water connections complete

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

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

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

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

Ellsworth AFB, SD: 23 off-base residential wells above LHA; 2 locations connected to base water supply, 2 locations connected to city water; filtration system installed at 16 residences, 86 residences 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

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 lon 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; 164 water systems installed, 6 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. 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 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

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

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

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

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

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

Current as of 3 October 2019