

# Air Force Installation and Mission Support Center PFAS at the former Reese AFB



## What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of synthetic, fluorinated organic compounds used in many industrial and consumer products. In 1970, the Air Force began using aqueous film forming foam (AFFF), which contains PFAS, to extinguish petroleum fires to protect people and property.

## Air Force Response to PFAS

The Air Force is taking aggressive measures at the former Reese Air Force Base (AFB), Texas, and Air Force-wide, to ensure communities have safe drinking water (DW). The Air Force is using a comprehensive approach — **identify, respond, prevent** — to assess potential risks to DW and, when necessary, take action to protect human health.

The Air Force is committed to working with the Texas Commission on Environmental Quality (TCEQ) and community leaders to protect human health on and around Former Reese AFB. The Air Force complies with the **Resource Conservation and Recovery Act (RCRA)** permit issued by TCEQ for all environmental restoration requirements at Reese.

## Reese PFAS Investigation

In 2014, the Air Force began assessing potential PFAS contamination stemming from historical AFFF use at the former base. Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) process, the Air Force conducted a Preliminary Assessment (PA) and Site Inspection (SI). SI fieldwork confirmed contamination exceeded TCEQ protective concentration levels, and the Air Force will complete remaining investigation work in compliance with the RCRA permit.

### ✓ Preliminary Assessment

**October 2014** Completed PA: identified 11 potential AFFF release areas & one former fire training area.  
**January 2016** Began PA: reviewed base records, collected info to identify areas with potential AFFF releases.

### ✓ Site Inspection

**March 2017** Began SI: sampled media to determine presence/absence of contamination.  
**October 2018** Completed SI: final SI report determined PFAS concentrations exceed TCEQ PCLs.

## Protective Concentration Levels

Per the RCRA permit, the Air Force adheres to the Texas Risk Reduction Program (TRRP). Under the TRRP, TCEQ published protective concentration levels (PCLs) for 16 PFAS, including PFOS and PFOA, in soil and groundwater (GW).

The Air Force also adheres to the Environmental Protection Agency (EPA) Lifetime Health Advisory (LHA) levels of 70 parts per trillion (ppt) for PFOS and PFOA in DW because the federal threshold is more conservative than TCEQ's PCLs for \*Tier 1 residential GW.

## Affected Property Assessment

The next phase of investigation in the RCRA process is an Affected Property Assessment (APA) and Remedial Investigation (RI). During the APA/RI the Air Force will begin delineating the nature and extent of contamination.

PFAS compounds with PCLs	GW (ppt)
Perfluorooctanesulfonic acid (PFOS)	*560
Perfluorooctanoic acid (PFOA)	*290
Perfluorononanoic acid (PFNA)	290
Perfluorohexanesulfonic acid (PFHxS)	93
Perfluoroheptanoic acid (PFHpA)	560
Perfluorobutanesulfonic acid (PFBS)	34,000
Perfluorodecanoic acid (PFDA)	370
Perfluorododecanoic acid (PFDoA)	290
Perfluorohexanoic acid (PFHxA)	93
Perfluorotetradecanoic acid (PFTeA)	290
Perfluorotridecanoic acid (PFTrDA)	290
Perfluoroundecanoic acid (PFUnA)	290
Perfluorobutanoic acid (PFBA)	71,000
Perfluorodecanesulfonic acid (PFDS)	290
Perfluorooctane sulfonamide (PFOSA)	290
Perfluoropentanoic Acid (PFPeA)	93

# Air Force Response to PFAS at Former Reese AFB

## IDENTIFY

- PA/SI identified GW impacts above LHA/ TCEQ PCLs at **10** areas and soil impacts at **8** areas.
- November 2017: based on SI sampling, began sampling DW sources within the study area.
- April 2018: Air Force implemented quarterly DW monitoring schedule.



- Providing alternative DW to all residences of **222** private wells and **three** public water wells that exceed the LHA and/or TCEQ PCL limits.
- Installing treatment systems at all affected wells by end of June 2019.
- Evaluating potential option to build water lines to affected homes in city limits.
- Conducting routine samples to monitor treatment system performance.

## RESPOND

## PREVENT

- The Air Force discontinued AFFF use following base closure in September 1997.



## Completed to date

Installed **30** new monitoring wells (MWs) for a total of **36** MWs for fieldwork activities.

Collected a total of **318** soil samples, **12** sediment samples and **nine** surface water samples during SI.

Sampled a total of **480** DW wells: identified **222** private wells and **three** municipal wells that exceed the LHA and/or TCEQ PCL limits.



## Upcoming



**30 June 2019**

Finish installing individual treatment systems

**November–December 2019**

Award contract for APA investigation.

**4 June 2019**

Public Meeting

**July-August 2019**

Quarterly DW Monitoring sampling.

**Spring 2020**

APA Investigation fieldwork to begin.

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