



## Former Reese AFB Begins Next Step in PFAS Investigation

### 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 U.S. Air Force (USAF) began using aqueous film forming foam (AFFF), which contains PFAS, to extinguish petroleum fires to save people and protect property.

### Air Force Response to PFAS

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

The USAF 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 USAF 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 USAF 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 (PCLs). The USAF will complete remaining investigations in compliance with the RCRA permit.

### Affected Property Assessment

The next phase of investigation in the RCRA process is an Affected Property Assessment (APA). During the APA, the USAF will delineate the nature and extent of contamination, identifying migration pathways, and determining if any response actions are necessary.

### Protective Concentration Levels

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

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

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 (PFTTrDA)	290
Perfluoroundecanoic acid (PFUnA)	290
Perfluorobutanoic acid (PFBA)	71,000
Perfluorodecanesulfonic acid (PFDS)	290
Perfluorooctane sulfonamide (PFOSA)	290
Perfluoropentanoic Acid (PFPeA)	93



**What will I see?**  
You might see drilling rigs in neighborhoods. They're gathering groundwater samples. You may have seen a drill rig before, as we began sampling in late June 2020.

# Air Force Response to PFAS at Former Reese AFB

## IDENTIFY

- PA/SI identified GW impacts above HA/ 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: USAF implemented quarterly DW monitoring schedule.



- Providing alternative DW to all residences where PFAS concentrations in private/public wells exceeded the HA and/or TCEQ PCLs.
- Installing treatment systems at all affected wells; **227** point of entry systems installed to date.
- Developing a cooperate agreement with the City of Lubbock to build water lines to affected homes in city limits.
- Maintaining and sampling treatment systems to ensure drinking water criteria are met.

## RESPOND

## PREVENT

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



## Completed to date

Installed **53** new monitoring wells (MWs) on and around the former Reese AFB during SI and APA fieldwork activities.

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

Sampled a total of **517** DW wells: identified **240** private wells and **four** municipal wells that exceed the HA and/or TCEQ PCLs.



## Milestones

