

AIR FORCE BRAC PROGRAM SNAPSHOT

FORMER WURTSMITH AFB

Wurtsmith Air Force Base, Michigan, served primarily as a combat crew and bomber training base from 1923 through its closure in June 1993 under Base Realignment and Closure legislation. The Air Force is committed to transparency and working with Michigan regulators and community stakeholders to protect human health and promote environmental awareness and economic opportunities for sustainable development.

EMERGING CONTAMINANTS

Perfluorinated compounds are a class of synthetic fluorinated organic compounds used in many industrial and consumer products, to include aqueous film forming foam used by commercial industries and the armed services to extinguish petroleum-based fires. In 1970, the Air Force began using Aqueous Film Forming Foam, which contains perfluorooctanesulfonic and perfluorooctanoic acids, or PFOS and PFOA, to extinguish petroleum fires to protect people and property.

In May 2016, Environmental Protection Agency established lifetime health advisory levels of 70 parts per trillion for PFOA and PFOS in drinking water (DW). These two compounds are classified as emerging contaminants due to evolving regulatory standards.

On January 10, 2018, the governor of the State of Michigan signed a bill promulgating new rules for PFOS/PFOA clean-up regulations. The state's new legally enforceable limit mirrors the EPA's 70 ppt HA.

The Air Force is using a comprehensive approach – **identify, respond, prevent** – to assess potential risk to drinking water, on and off installations, and respond appropriately.

AIR FORCE RESPONSE TO PFOS/PFOA AT WURTSMITH

The Air Force is committed to protecting human health on and around the former base and is working with regulators and community leaders to identify drinking water exposures above the EPA LHA and address concerns.

The Air Force's investigation work and mitigation actions are guided by the Comprehensive Environmental Response, Compensation and Liability Act, or CERCLA, applicable state laws and the EPA's drinking water LHA.

WURTSMITH AFB QUICK FACTS

4,354

274

Acres Transferred | Acres Remaining

\$85.92 M
Cost-to-Date

\$120.20 M
Cost-to-Complete

Redevelopment Supports...

440+

Private
businesses
and public
agencies

1,300

New jobs
created

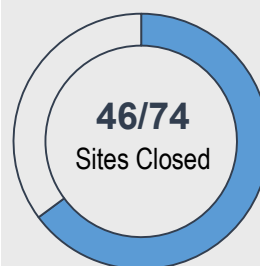
700

Privately
owned
residential
homes

2024

Anticipated
Whole Base
Transfer
year

Restoration Highlights:



▶ **526.9** million gallons of contaminated groundwater pumped through five plants, **115.6** million gallons pumped and treated in 2017

▶ Implemented an engineered wetland system to effectively and sustainably treat landfill discharges

▶ **1,100** cubic yards of contaminated soil excavated, treated and backfilled to complete fuel cleanup at a KC-135 crash site

▶ Employed In-situ chemical injections to remediate chlorinated solvents in soil and groundwater, accelerating cleanup and site closures

PFOS/PFOA Investigation

Preliminary Assessment (PA)

Base-wide records review identifies areas AFFF was stored, used or potentially released.

- **Jan 2016:** AFCEC completes PA to identify potential AFFF release areas.

Site Inspection (SI)

Sampling is conducted to verify presence or absence of PFOS/PFOA. Sampling is prioritized based on **probability** of contamination, **possible pathways** for contaminants to reach DW sources and **proximity** to groundwater. Supplemental SI sampling can take place following initial SI work.

- **2016:** AFCEC completes SI field work at potential AFFF release areas. SI sampling confirmed PFOS/PFOA contamination at 13 areas. Fieldwork included 209 GW samples, 60 surface and/or subsurface soil samples, 14 sediment, five process water and four surface water samples.
- **Oct 2017:** AFCEC initiates an SSI to evaluate probability of contamination, possible pathways for contaminants to reach DW sources and proximity to GW. Additional SSI fieldwork is planned throughout 2018-2019.

Protecting Drinking Water Sources

Drinking Water Sampling

Sampling determines whether drinking water is impacted by PFOS/PFOA stemming from base mission activities.

- **Dec. '15 - May '16:** AFCEC conducts private well sampling between the base, Van Etten Lake and Van Etten Creek, sampling 54 residential wells and two public wells; AFCEC resamples wells Aug-Sep 2017.
- **Spring 2018:** AFCEC implements a monitoring schedule for private drinking wells within the base study area for a three-year period.

Mitigation

If sample concentrations exceed the EPA LHA, the AF immediately provides an alternate DW source.

The Air Force can take additional mitigation actions to mitigate groundwater contamination if sampling results indicate a potential risk to drinking water.

- **June 2016:** One private well exceeds the LHA. The Air Force provides bottled water and then connects the residence to a municipal supply.
- **April 2015:** AFCEC installs a Granular Activated Carbon Pump and Treat System at Fire Training Area 2 to prevent further contamination of Clark's Marsh and the Au Sable River.
- **Aug. 31, 2018:** AFCEC constructs a central GAC GW treatment system and connects the Arrow Street plant.
- **Oct. 17, 2018:** AFCEC connects the Benzene Plant to the central GAC GW treatment system.

NEXT STEPS

Wurthsmith RAB meeting

5 December 2018

Collect round 4 of quarterly private DW well samples

March/April 2019

Tentative Wurthsmith RAB Meeting

TBD April 2019

December '18/January '19

Collect round 3 of quarterly private drinking water well samples

July/August 2019

Anticipated SSI draft report delivery



The BRAC Program Management Division at AFCEC oversees environmental remediation and property transfer for the Air Force at 40 installations across 21 states to achieve recovery of asset value, early property disposal and early environmental resolution. To date, the program has transferred 97 percent of its 88,250 acre portfolio back to local communities.

For more information contact AFIMSC/PA: 1-866-725-7617 | 210-925-0956 | AFIMSC.PA.workflow@us.af.mil | www.afcec.af.mil