#### **Air Force Civil Engineer Center**



# Cannon AFB PFAS Public Update

17 May 2023







- AFFF PFAS Investigation
- Engineering Evaluation/Cost Analysis Pilot Study
- Due Diligence for Supplemental PFAS Sources
- Going Forward
- Additional Information
- Common Acronyms



#### AFFF PFAS Investigation



- Preliminary Assessment (PA) Completed Oct 2015
- Site Inspection (SI) Completed Aug 2018
- **■** Expanded SI Completed Sep 2018
- Remedial Investigation (RI) In progress
- Feasibility Study
- Public Participation/Record of Decision
- Remedial Design/Remedial Action
- Remedial Action Completion Report/Response Complete



#### AFFF PFAS Remedial Investigation



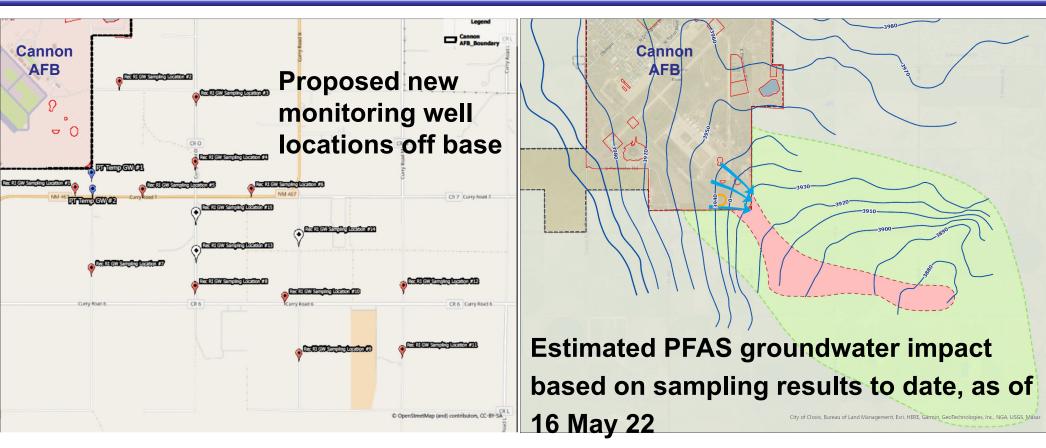
#### Remedial Investigation Status

- Aug 2020 RI Contract awarded
- Jun 2021 RI Work Plan/QAPP sent to NMED & EPA for 30 Day regulatory review; review period 23 Jun 23 Jul 2021
- Work Plan completed Sep 2021
- May 2022 RI work completed to date:
  - Soil samples: on Base 753 off Base 34
  - Sediment samples: on Base 12
  - Surface Water Samples: on Base 12
  - Groundwater samples: on Base 19 off Base 34
  - Continuing installation of 13 new monitoring wells on base; 9 installed
  - Planning 15 new off base monitoring wells



## AFFF PFAS Remedial Investigation







# Engineering Evaluation/Cost Analysis – Pilot Study



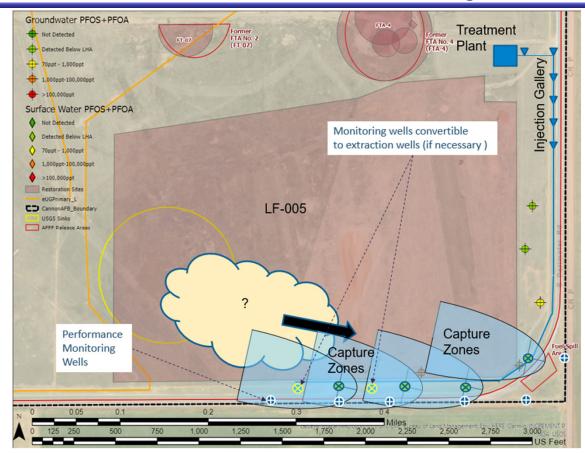
- Award COMPLETED 27 May 2021
- Initial Site Visit COMPLETED 2 Jun 2021
- Kick-Off Meeting COMPLETED 8 Jun 2021
- Sampling Event COMPLETED 14 Jun 2021
- Treatability Study COMPLETED Dec 2021
- Aquifer Test COMPLETED Dec 2021
- Design/Work Plan IN PROGRESS May 2023
  - Draft-Final Design at NMED and EPA comments; 30-Day period ends 26May2023
- Construction Start May/Jun 2023
- Operation Start Mar 2024
- EE/CA Final Jun 2024
  - (30-day NMED/EPA/Public comment period)



# Engineering Evaluation/Cost Analysis – Pilot Study



- Extraction wells
  - 4 extraction wells with pumps
  - 2 extraction wells with no pumps used as monitoring wells
- 6 Injection wells





### Due Diligence for Supplemental PFAS Sources



- Due Diligence for Supplemental PFAS Sources In Progress
  - **Contract Awarded September 2022**
  - Site Kick-off meeting February 2023
  - Work plan completed April 2023
  - Draft Report estimated May-June 2023
- Any additional sites identified through this assessment will be added to the existing Remedial Investigation



#### Due Diligence for Supplemental PFAS Sources



- Work will consist of data collection and review to determine any locations that are potential areas requiring further investigation. Any sites selected for further investigation will move to the Remedial Investigation phase
- Examples of areas that will be investigated:
  - Biosolids, Carwashes, Automotive/Hobby Shops/Motor Pool, Warehouses and other storage (if stored materials in question), Landfills, Medical Clinics/facilities (x-ray film), Landscaping Sheds, Herbicides/Pesticides/insecticides, Sewers/Storm water runoff, Gas Pumps



#### PFAS Response Spending to Date



- **■** Expenditures to date \$37,288,905
  - Preliminary Assessment (PA): \$38,754
  - Site Inspection (SI): \$2,024,231
  - Expanded Site Inspection (ESI): \$505,000
  - Remedial Investigation (RI): \$10,377,619
  - United States Geological Survey (USGS) work to understand groundwater flow: \$735,000 in FY20, \$1,065,000 in FY21, \$987,000 in FY22, \$582,000 in FY23
  - Engineering Evaluation/Cost Analysis (EE/CA) Pilot System: \$20,840,491
  - Due Diligence for Supplemental PFAS Sources: \$133,810



### **Going Forward**



- EE/CA Pilot Study
  - Design Phase Finalization and begin construction
- AFFF Remedial Investigation
  - Field work; continue monitoring well installation both on and off base while collecting additional soil samples
- Due Diligence for Supplemental PFAS Sources
  - Commence field work consisting of data analysis
- Next Public Update
  - Tentatively planned 15 Nov 2023



#### **Additional Information**



#### Admin Record (AR) Links to Cannon Air Force Base reports:

Admin Record <a href="https://ar.afcec-cloud.af.mil/">https://ar.afcec-cloud.af.mil/</a>

PA: AR# 1941

SI: AR# 1938

Off base SI: AR# 1940

RRSE: AR# 2063, 2790

■ Treatability Work Plan: AR# 2072

RI Work Plan: AR# 2074

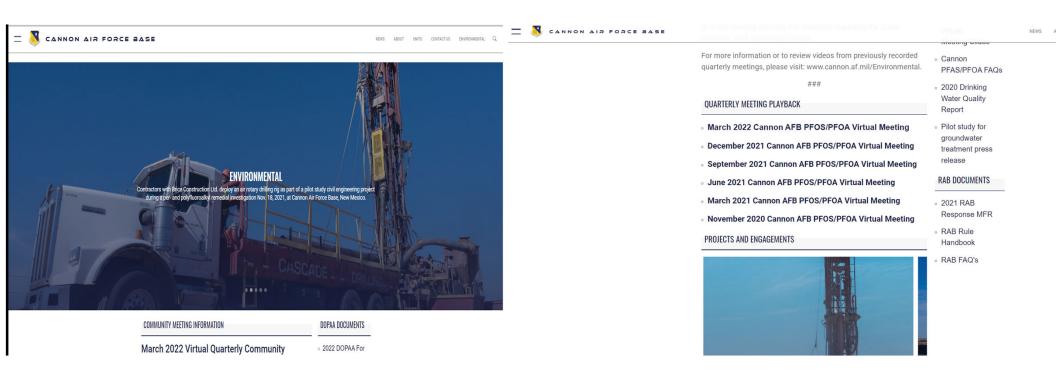
Aquifer Test Work Plan: AR# 2075





#### **Additional Information**





https://www.cannon.af.mil/Environmental/

Your Success is Our Mission!



- Administrative Record (AR)
- Aqueous Film Forming Foam (AFFF)
- Agency for Toxic Substances and Disease Registry (ATSDR)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- Department of the Air Force (DAF)
- Department of Defense (DoD)
- Engineering Evaluation/Cost Analysis(EE/CA)
- Environmental Protection Agency (EPA)
- Food and Drug Administration (FDA)
- Lifetime Health Advisory (LHA)





- Parts Per Trillion (ppt)
- Per- and polyfluoroalkyl substances (PFAS)
- Perfluorooctanesulfonic acid (PFOS)
- Perfluorobutanesulfonic acid (PFBS)
- Perfluorooctanoic acid (PFOA)
- Preliminary Assessment (PA)
- Remedial Investigation (RI)
- Relative Risk Site Evaluation (RRSE)
- Site Inspection (SI)



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Any question please contact 27SOCES.cannon.rpm@us.af.mil