# Air Force Civil Engineer Center

Integrity - Service - Excellence



Former Pease AFB
Perfluorinated
Compounds (PFCs)
Program Status
26 August 15



### **Topics**

- Protect Drinking Water
- Show Progress
- Communicate What's Ahead
- Maintain Community Relations



# **Protecting Drinking Water**

- Why We Are Here
  - Air Force is committed and required by law to protect human health and the environment
  - Air Force is taking actions to control PFCs to assure safe drinking water
  - Air Force is fulfilling our long term obligation to address environmental issues at Base Realignment and Closure (BRAC) bases



# **Protecting Drinking Water**

- What Air Force is doing nationally
  - Actively identifying known or suspected sites where PFCs may have been released
  - Sampling to determine if PFCs are present where releases are suspected
  - Determining if a public or private drinking water supply is impacted where PFCs are found above the Environmental Protection Agency (EPA) provisional health advisory
  - Taking appropriate actions to ensure availability of safe drinking water



### **Air Force Presenters**

- Val de la Fuente Accomplishments
- Peter Forbes What's Ahead
- Mark Kinkade Community Relations



# By the Numbers

- 700 water samples collected have confirmed drinking water below PHA
- 731 land parcels reviewed and owners contacted to find private wells
  - 39 private drinking water wells identified, 38 have been sampled
  - 1 home provided with in-home PFC treatment system
- 21 areas identified at Pease where releases of PFCs may have occurred
- \$3M invested to date
- 40 meetings with city, state & federal regulators since May 2014



#### Protecting Public Water Supply

- Led collaborative effort to sample Haven Well and other wells in April 2014 -- Haven Well shut down by City of Portsmouth in May 2014
- Established monitoring program to protect public -- 57 monitoring events to date with over 425 water samples collected
- Monitored Harrison, Smith, Collins and Portsmouth Wells regularly since June 2014, PFCs well below EPA Provisional Health Advisory (PHA) Levels with no increasing trends
- Collected groundwater samples around the Haven Well to better understand PFC concentrations (89 locations, 122 samples)
  - PFC concentrations in Fall 2014 and Spring 2015 are similar -migration not evident



#### Protecting Private Water Supply Wells

- Began sampling private water supply wells in June 2014
- Conducted private well survey within 1 mile radius of former base boundary in Fall 2014
  - 731 properties were evaluated to locate private drinking wells
  - 39 private drinking water wells identified, 38 have been sampled
  - Identified a PFC above PHA in one private water supply well
    - Advised resident and immediately provided bottled water
    - Installed in-home treatment system

Found every known private water supply well and have taken action when PFC above acceptable level.



- Identifying Where PFCs are and Where they Might be Going
  - Confirmed where PFCs are in the vicinity of the Haven Well and fire training area to the north
  - Identified 21 areas basewide where Aqueous Film Forming Foam (AFFF) may have been used, stored, or released to the environment
  - Initiated additional sampling to refine our understanding of PFC movement in groundwater



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### Collaboration

- Purpose: share information, promote efficient coordination, and achieve best outcomes for all parties
- Collaborators
  - EPA
  - New Hampshire Department of Environmental Services (NHDES)
  - New Hampshire Department of Health and Human Services (NHDHHS)
  - City of Portsmouth
- Forums
  - Weekly stakeholder meetings
  - Regular follow-up with individual stakeholders
  - Technical meetings



### Collaboration

- Funded Agency for Toxic Substances and Disease Registry (ATSDR) to develop Public Health Consultations for PFCs
- Memorandum of Agreement with City of Portsmouth for:
  - Hydrogeological studies for new drinking water wells
  - Routine samples of Smith, Harrison, Portsmouth, and Collins Wells



### What's Ahead

- Continue monitoring sentry wells to provide early detection if PFCs start migrating towards the Smith and Harrison Wells
- Define PFC boundaries thru large-scale investigation (Spring 2016)
- Evaluate intercept treatment system to protect the Smith and Harrison Wells (Spring 2016)
- Design and build Haven Well area PFC treatment system (Fall 2016)
- Construct new intercept treatment system at Fire Training Area to protect private wells in Newington area, also optimizing existing system for removal of PFCs (Fall 2016)



# What's Ahead (continued)

#### Public Water Supply

- Continue monitoring groundwater to provide early detection if PFCs start migrating towards the Smith and Harrison Wells
  - Southern well field protection monitoring plan (Fall 2015)
  - Install 43 new monitoring wells (Fall 2015)
- Construct a treatment system for the Haven Well area groundwater (Fall 2016)
- Complete design of a contingent treatment system for the Smith and Harrison Wells (Spring 2016)
- Evaluate intercept treatment system to protect the Smith and Harrison Wells (Spring 2016) and install system (Fall 2017)



### What's Ahead (continued)

#### Private Water Supply Wells

- Continue monitoring private wells for PFCs
- Re-activated (10 Aug 15) existing groundwater treatment system at Fire Training Area (Site 8) and will modify the system to maximize performance (Fall 2015)
- Construct new interceptor treatment system at Fire Training Area (Fall 2016)



# What's Ahead (continued)

#### Basewide Efforts

- Define PFC boundaries thru large-scale investigation (Spring 2016)
  - Sample groundwater in potential AFFF release areas
    - Approximately 280 groundwater monitoring points will be sampled for PFCs, including approximately 115 additional data points
- Will provide a complete understanding of the PFC distribution to ensure continued protection of the private and public drinking water supply



### **Objectives**

- Transparency: Provide timely and accurate information about AF activities and actions regarding PFCs
- Open Dialogue: Encourage and participate in constructive dialogue
- Collaboration: Invite input and involvement by affected communities





#### What have we done so far?

- Responded to media queries with Portsmouth news outlets
- Monitored frequently asked questions to develop AF responses for PFCs
- Produced informative PFC video
- Developed AF PFC website
- Participated in public meetings on PFCs

### What will we do moving forward?

- Re-establish Restoration Advisory Board (RAB) (Fall 2015)
- Participate in public meetings and events
- Produce quarterly newsletters



### **Restoration Advisory Board (RAB)**

- AF will reinstate RAB to ensure local communities have an active voice in environmental restoration review, including PFC actions
- RAB membership will include representation between government and community members
  - **Government members**: AF, regulatory representatives, EPA, local communities, and others
  - Community members: volunteers interested in providing advice to the decision-makers on PFC clean up
- RAB will complement other community involvement efforts



# Air Force PFC Communications

- Air Force PFC information can be found on AFCEC website: <a href="http://www.afcec.af.mil/environment/perfluorinatedcompounds/index.asp">http://www.afcec.af.mil/environment/perfluorinatedcompounds/index.asp</a>
- Site contains PFC information briefs, FAQs, Fact Sheets and reference materials
- Contact us for more information: <u>afcec.pa@us.af.mil</u>





### **Summary**

#### **Protecting Human Health – AF Priority**

All public and private wells are being protected

#### The PFC solution will take time

AF is taking actions that will contribute to a solution

AF is committed to open communication

AF has a proven track record of resolving contamination issues

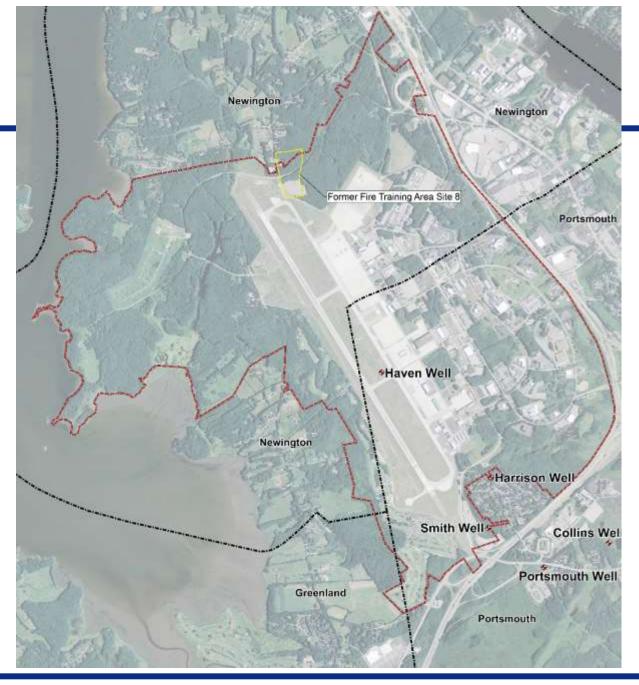


# Open Forum Discussion



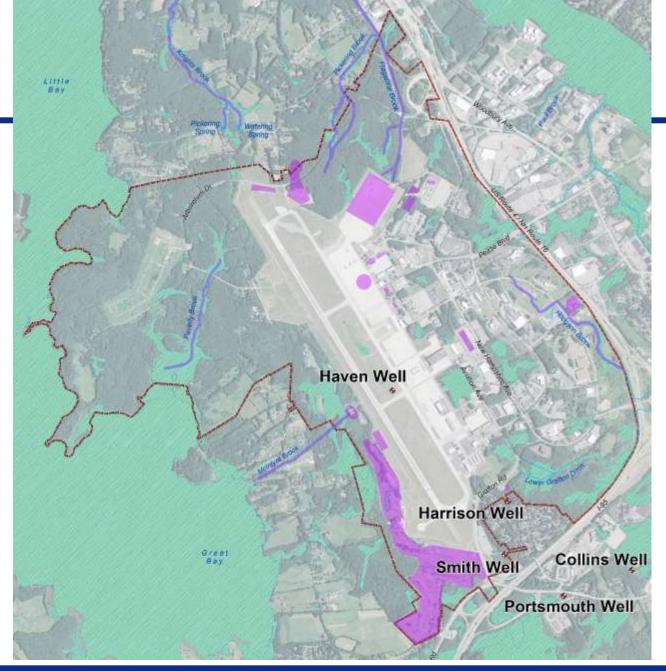
# Maps





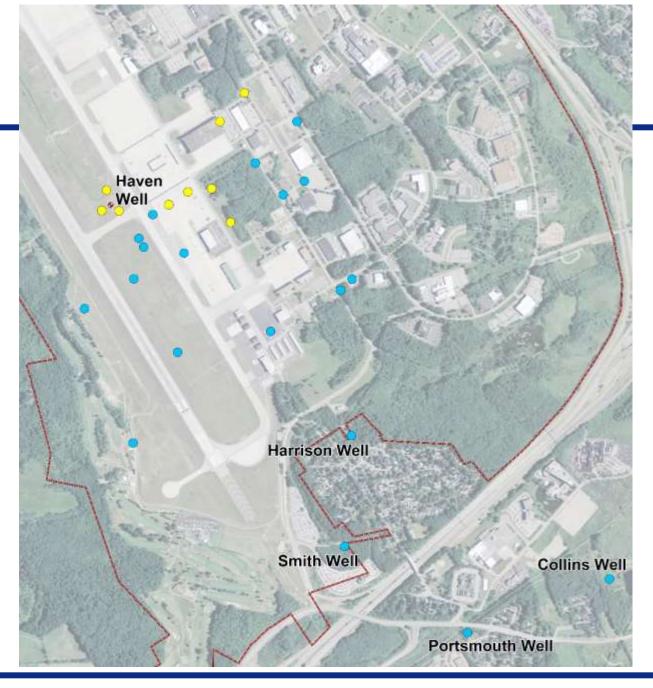
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