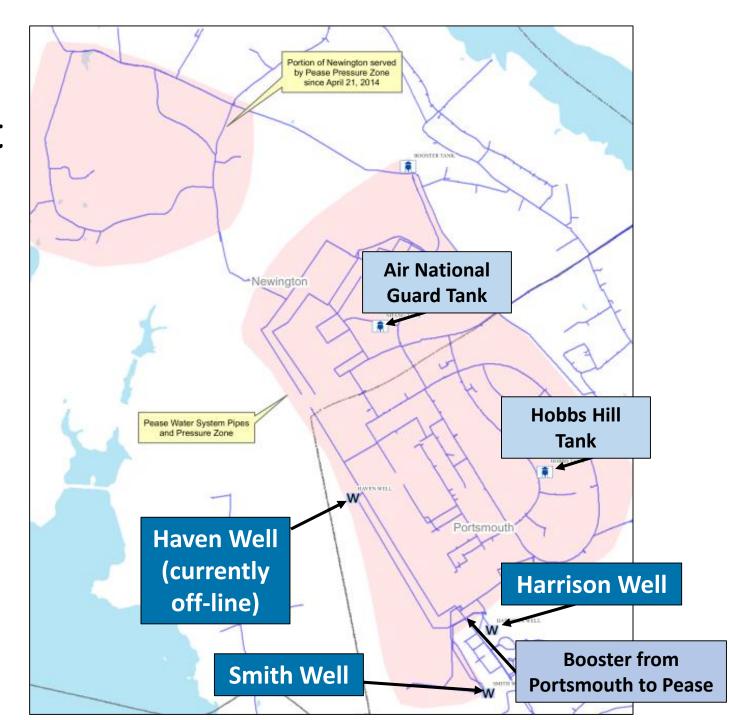


Pease Tradeport Water System: Drinking Water Treatment System Update City of Portsmouth

Pease RAB October 24, 2017

Pease Tradeport Water System

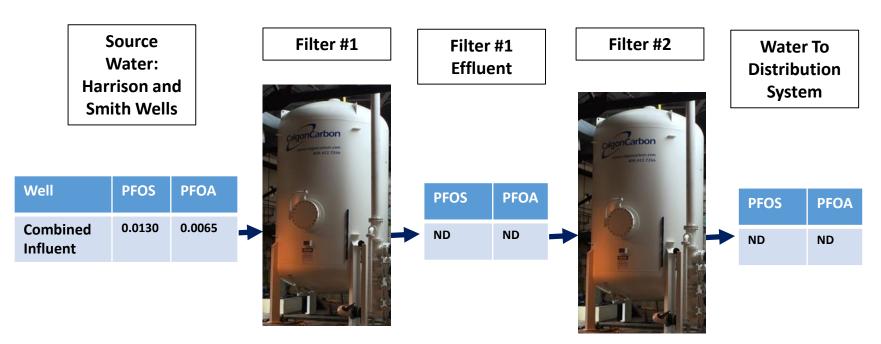
- 3 Wells
- 2 Storage Tanks
- Booster from Portsmouth to Pease
- 30 Miles of water main
- 0.4 to 1.0
 Million
 Gallons per
 Day Usage



Well Treatment – Progress

- Preliminary Design Complete (Feb. 2016)
- Piloting Complete (Sept. 2016)
 - Pilot Report on City Website
- Demonstration filters for Harrison and Smith Wells Current (Online Sept. 2016)
- Additional preliminary design and assessment of other municipal treatment systems — Completed June 2017
- ECT₂ performing a pilot study on resins Currently completed on Harrison/Smith Wells. Moving on to pilot Haven Well.
- Final Treatment System Design Ongoing, August 2017 start (8 month process)
- Haven Well Piloting Mobilizing in October to test efficacy of filter media on Haven water

Pease Tradeport Water System Activated Carbon Treatment Demonstration Project Sampling: September 21, 2017 Results

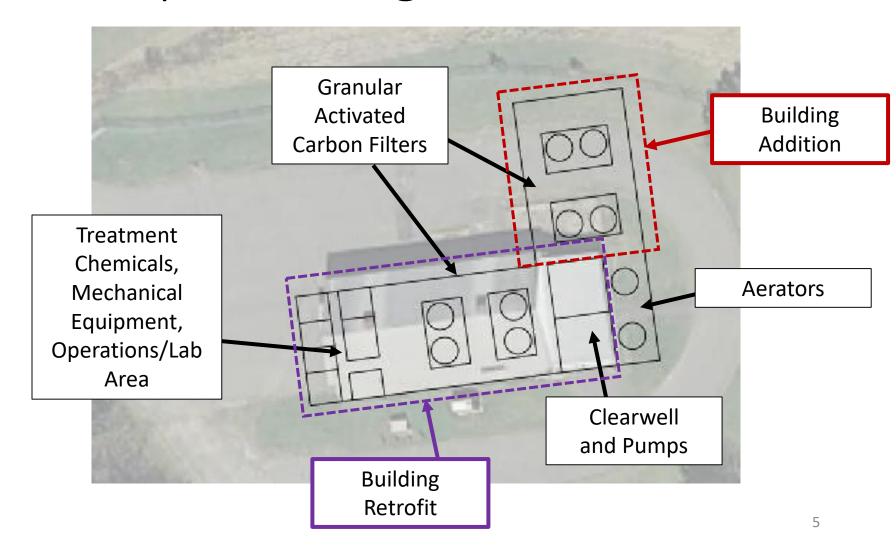


Sample Rounds – 30 Gallons Treated – 151 million gallons Filter Bed Volumes – 28,783 Notes: All samples in parts-per-billion (ppb)

ND = Non Detect

All samples collected by Weston & Sampson and analyzed by Maxxam Laboratory

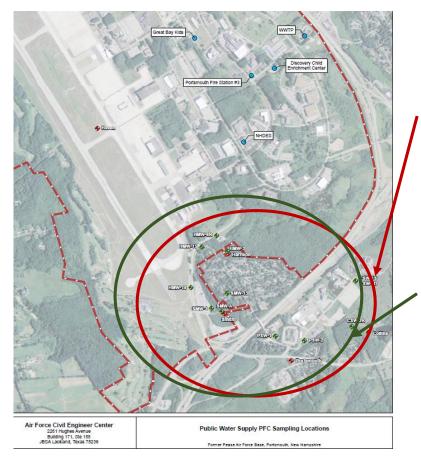
Pease Well Treatment System Conceptual Design:



Pease Well Treatment System Conceptual Design:



PFAS Monitoring Locations – Air Force Consultant



Production Well Monitoring – New Schedule with Filters on line:

- Smith monthly
- Harrison monthly
- Portsmouth monthly
- Collins monthly

Sentry Wells

11 Wells - Quarterly

"Sampling data collected since April 2014 shows very consistent concentrations of PFOS/PFOA, no discernible plume movement and no EPA health advisory exceedance." – Air Force Press Release (July 21, 2017)

Haven Well Reactivation – Hydrogeologic and Water Quality Monitoring Program

- Meeting in September of Project Technical Team to discuss past and future monitoring of Haven well and Aquifer.
- Intend to develop comprehensive monitoring plan of PFAS and other key water quality parameters.
- Meeting again in January to review.

City Website Updates



PEASE TRADEPORT WATER SYSTEM

The City of Portsmouth's Water Division has been actively working with the United States Air Force (Air Force), the United States Environmental Protection Agency (EPA), and the New Hampshire Department of Environmental Services (DES) in response to the detection of elevated levels of the unregulated contaminant perfluorocctane sulfonic acid (PFOS) from the Haven Well, one of three wells that serves the Pease International Tradeport and the New Hampshire Air National Guard base at Pease. PFOS is one of a class of chemicals known as PFCs or perfluorochemicals. Because the level of PFOS exceeded the "provisional health advisory" set by the EPA, the well was shut down by the City of Portsmouth on May 12, 2014 and since that time it has been physically disconnected from the system. A number of actions have been taken by the project team. The following documents provide additional Information:

- Pease Water Supply and PFC Demonstration Project 10.03.17
- Pease RAB Meeting 7.26.17 Drinking Water System Update
- Pease Water Supply and PFC Demonstration Project Update 07.10.17
- Pease Well Treatment Cost Alternative Report June 2017
- Pease Water Supply and PFC Demonstration Project Update 05.25.17

Website Updates – Monitoring Data

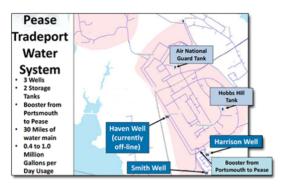
City of PORTSMOUTH NH | DEPARTMENT OF PUBLIC WORKS | WATER

Water Quality
Supply Status Water Efficiency
Billing Information Contact

PEASE WELL MONITORING AND SAMPLING RESULTS

The Air Force's consultants under the direction of the EPA and DES and in cooperation with the City of Portsmouth have been sampling PFCs in and around the effected Portsmouth drinking water wells. Once validated, this data is posted below:

- Pease PFC Sampling Locations
- Pease Comprehensive PFC Sampling Data August 2017
- Pease Comprehensive PFC Sampling Data May 2017
- Pease PFC Sampling Data May 2017
- Pease Well PFC Results through April 2017
- Pease Well PFC Results through 12.14.2016
- Pease Well PFC Results Most Recent 11 17 2016
- Pease Well PFC Results Most Recent 10 19 2016
- Pease Well PFC Results thru 10 19 2016
- Pease Well PFC Results Most Recent 08 30 2016
- Pease Well PFC Results thru 08 30 2016
- Pease Well PFC Results Most Recent 06_23_2016
- Pease Well PFC Results thru 06_23_2016
- Pease Well PFC Most Recent Summary May 2016
- Pease Well PFC Results thru 5/31/16
- Pease Well PFC Results thru 4/20/16
- Pease Well PFC Results thru 2/23/16
- Pease Well PFC Results thru 01/26/16



Website Updates – Additional Information

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PFAS INFORMATION

- Drinking Water Health Advisories
- Perflourinated Compounds Factsheet
- Resources for Identifying and Managing PFCs
- PFAS Treatment and Removal

PEASE RESTORATION ADVISORY BOARD (PEASE RAB)

The Air Force Civil Engineer Center, or AFCEC, has reestablished the Restoration Advisory Board at the former Pease Air Force Base. The first meeting of this Board was held on April 19, 2016.

The Pease Restoration Advisory Board, or RAB, is a stakeholder group that meets quarterly to discuss ongoing environmental restoration of Pease. It provides community members an open forum to talk with the Air Force and regulatory agencies about environmental restoration activities. With input from the U.S. Environmental Protection Agency and New Hampshire Department of Environmental Services, the Pease RAB was recently reestablished due in part to recent concerns over the presence of perfluorinated compounds, or PFCs, in groundwater at the former base.

The Pease RAB consists of 14 board members, including eight local volunteer community members and six appointed members representing the Air Force, regulatory agencies, the Pease Development Authority and the City of Portsmouth. A RAB Orientation Meeting was held in March to provide information on RAB member roles and responsibilities and to assist them in gaining an understanding of environmental issues at Pease.

Information about past and upcoming meetings can be accessed here.



www.cityofportsmouth.com/publicworks/ water/pease-tradeport-water-system