# City of Portsmouth Department of Public Works



# June 30, 2016

# **Pease International Tradeport Water System Update**

The following update regarding the Pease Tradeport Water System's response and actions since the discovery of PFCs (perfluorochemicals) in the Haven Well in May 2014:

## **Health Advisory for PFOA and PFOS**

EPA recently issued new health advisories of  $0.070~\mu g/L$  (micrograms per liter) for PFOA and PFOS. The prior values for these compounds were  $0.400~\mu g/L$  for PFOA and  $0.200~\mu g/L$  for PFOS. The two wells that supply the Pease Tradeport Water System have combined levels of PFOA and PFOS that have consistently been below this limit since sampling began in 2014. The Smith well is sampled weekly and the Harrison well bi-weekly. In addition to monitoring the wells, the water supplying Pease is blended with City of Portsmouth water which lowers the level of PFCs serving Pease customers. The most recent samples of tap water in Pease both had combined levels of PFCs of  $0.018~\mu g/L$ . Once the City receives the validated results for these wells, plus quarterly sampling in the distribution system, the data is updated and posted on the City's website at:

http://www.cityofportsmouth.com/publicworks/phwn.html

The following table summarizes the most recent sample data the Pease water system:

Sample Location	Sample Date	PFOA	PFOS	Combined
		(µg/L)	(µg/L)	(ug/L)
* EPA Health Advisory Limt (May 2016)		0.070	0.070	0.070
Harrison Well	May 26, 2016	0.007 J	0.023	0.030
Smith Well	May 31, 2016	0.005 J	0.011 J	0.016
<b>DES Office (New Hampshire Avenue)</b>	May 26, 2016	0.006 J	0.012 J	0.018
Fire Station No. 3 (International Dr.)	May 26, 2016	0.006 J	0.012 J	0.018

ND - Not Detected

μg/L – micrograms per liter or parts per billion

J – The result is an estimated value

#### **Water System Operations**

The Pease Water System water demands are currently being met by supply from two Pease wells, the Harrison and Smith wells, supplemented by water boosted from the City of Portsmouth pressure zone. Overall water system demands for the combined Pease/Portsmouth water system have been met by the combined resources of the system's surface water supply and eight other wells. System operators continue to track water system demand on a daily basis to assure that our supply meets demand. This information is summarized and published monthly on the City's website via the "Water Supply Status Report." The current dry conditions, coupled with high water demand, have led to the issuance of an advisory to all customers to be as efficient as possible with water use through voluntary water restrictions.

http://www.cityofportsmouth.com/publicworks/index.htm - Public Works - Water

#### **Water Quality Monitoring**

The Air Force's consultant has been performing frequent routine sampling of the water supply wells in the system near the Haven Well. The Smith Well is sampled weekly for PFCs and the Harrison Well is sampled every two weeks. In addition to the water supply wells, the Air Force's consultant is sampling other monitoring wells in the surrounding area to track the aquifer and monitor for any PFCs moving toward the supply wells. To date, PFC levels in the currently operating supply wells remain below the EPA's health standards. Data is updated on the City's website once it has been validated by the laboratory and provided to the City by the Air Force's consultant.

#### **PFC Contaminant Investigation**

The Air Force has engaged their engineering consultant to further identify the source areas where the PFC contamination is concentrated. They have also installed additional monitoring wells in the aquifer to develop a profile of the contaminated zones so they can better assess the potential for it to travel beyond the Haven Well area. This information has provided the basis for further investigations and/or mitigation. Preliminary reports of these assessments have been submitted to the City for our review and comment.

## **Biometric Monitoring of Potentially Impacted Water Users**

The New Hampshire Department of Health and Human Services (DHHS), Division of Public Health Services has been the lead agency in response to the potential health effects of PFCs. They are also the lead agency involved with blood testing of people exposed to the water. Questions with respect to health effects and/or testing are to be directed to the New Hampshire Department of Health and Human Services Public Information Office at (603) 271-9391.

Additional information can be accessed at the DHHS website:

http://www.dhhs.nh.gov/dphs/investigation-pease.htm

#### **Treatment of Pease Wells**

In April, 2016 the City of Portsmouth, the Pease Development Authority (PDA) and the United States Air Force announced the execution of an agreement to enable an upgrade of the Pease Tradeport water treatment system in order to install carbon filters to treat PFCs from water supplied by the Smith, Harrison and Haven Wells. Through this agreement, the City is moving forward with the installation of carbon filters for the Harrison and Smith wells, and subsequent design of treatment for the Haven Well. Treatment of all the wells has been a goal of the City since the contamination was first discovered and was requested directly of the Air Force through correspondence beginning in June 2014.

The treatment of the Harrison and Smith wells will demonstrate the effectiveness of the technology and performance of the system. This information will then be used by the City's consultant to revise the final design parameters for treatment of the Haven Well. The filters are on order and we anticipate delivery in mid-July with installation to follow. Design of the Haven treatment system will proceed after the demonstration filters have been installed. Portsmouth also continues to support the goals of the EPA and DES with regard to aquifer restoration; our work will continue to be in parallel with the work that the Air Force is undertaking to satisfy the EPA's administrative order issued in July 2015.

This agreement with the Air Force will reimburse to the City for up to \$58,700 for the system piloting and \$831,000 for the filter installation and demonstration project. Additional agreements between the City and the Air Force for design and construction of the Haven Well treatment system are anticipated to be negotiated later in this year.

### **Further Updates and Information**

The City and the Air Force will continue to provide additional updates. This information will be distributed electronically on the City of Portsmouth's website in the Department of Public Work's "Water" section. If anyone needs additional information or has questions contact Brian Goetz, Deputy Director of Public Works at 766-1420.