

Horsham

Water Quality Update

December 11, 2019

Short Term Remediation Action Plan:

- HWSA has shutdown Wells 7, 9, and 21. All three wells remain in active status in order to perform monthly sampling.
- North Wales Water Authority: 625,000 gpd;
 - 2.1 ppt combined (Oct. 2019 test result)
 - 2.5 ppt combined (Sept. 2019 test result)
 - 2.6 ppt combined (July 2019 test result)
- Aqua PA interconnect: shutdown on Oct. 7th and next time it is turned on it will be filtered
 - November 5th test: 3.1 ppt combined
 - Oct. 21st test: 5.9 ppt combined
 - Oct. 7th test: 9 ppt combined
 - Sept. 16th test: ND

Short Term Remediation Action Plan:

- Well 10 is on the public system using anion exchange resin only as a pilot
 - Production is 50 gpm or 48,000 gpd which is 2% of daily production
 - Configuration is similar to GAC treatment systems with 2 vessels in series
 - PFAS testing is performed every 2 weeks at raw, midpoint and post treatment similar to the GAC systems
 - Performance of the resin has been superior to that of GAC for all PFAS compounds detected
 - After 14 months of operation, only the short chained Perfluorohexanoic acid (PFHxA) has broken through at the midpoint location (in May 2019) and has just recently has broken through the 2nd vessel just above the detection level
 - PFHxA concentrations in the raw water at Well 10 are ~ 10 ppt or less.
 - Based on existing health information, PFHxA is ***not*** considered a carcinogen, reproductive or developmental toxicant, or a endocrine disruptor.
 - There are no Health Advisories in place either federally or in other states for PFHxA. Michigan has proposed a drinking water standard for PFHxA at 400,000 ppt (for reference, Michigan's proposed PFOA and PFOS water quality standards are 8 ppt and 16 ppt respectively)
 - In keeping with Horsham's more stringent and protective "non-detect" standard for PFAS, HWSA is now working to replace the resin in the lag vessel of the pilot to ensure that the PFHxA is absorbed while testing for breakthrough of the other PFAS material in the lead vessel continues.

Long Term Remediation Action Plan:

- Wells 2, 4, 19, 20 and 22 all in service with permanent treatment systems
- Aqua Interconnect: construction is on-going. Contractor is substantially completed. Start up testing will be started by Dec. 13th. DEP inspection will be in next couple of weeks. Hope to have back in service to the public system in early next year
- All main extensions are complete
- NWWA interconnection on County Line Rd is operational.

- Private Wells:

- One new private well tested above LHAL, total is now at 99 for drinking water wells & 7 for non-drinking water wells (Navy - 101 and NGB - 5)
- 91 have been connected to the public system
- Another 3 are in the progress of being connected.
- Two property owners have rejected the offer to be connected.
- Two property owners have not responded.

- Park Creek Treatment Plant Wastewater:

- Effluent monitoring results averaging 24 ppt combined.
- Influent monitoring March was result 28 ppt combined. May result was 26 ppt combined. August result was 18 ppt combined.

Navy Stormwater Management Update

Navy Plan for Pilot Pump and Treat Plants

- Hanger 680 Site:
 - In start-up test mode
 - Full operation expected by end of December 2019
- Horsham Road Site:
 - Draft work plan expected January 2020
 - Work plan incorporates improvements identified from Hanger 680 system

Storm Sewer Pipes

- Additional video of storm sewer pipes were completed. Storm sewer pipe work is scheduled to start in Spring 2020.
- Navy has taken samples from surface water and sediment on and off the Base as per their Surface Water Monitoring Sampling Analysis Plan and the July results were shared at the Dec. 4, 2019 RAB meeting. The October results are currently being validated.

Updates:

- **Horsham Township letter to Navy and National Guard Bureau to test soils at the Strawbridge Park**
 - **Navy responded and declined**
 - **No response from the National Guard Bureau**

- **HWSA Lawsuit against fire fighting foam manufacturers:**
 - **Case has been assigned to Federal Court in South Carolina**
 - **Complaint has been officially filed**
 - **Federal Judge and attorneys from both sides are reviewing informational requests from each side**

- **CDC/ASTDR National PFAS Health Study**
 - **Horsham/Warminster/Warrington one of seven sites nationwide to be selected to receive Federal funding**
 - **Horsham Township wrote letters of support, lobbied for funding and have committed Township resources for the study**
 - **PADOH, RTI International and Temple University will lead the study**
 - **Study will include blood samples from 1,000 adults and 300 children ages 4 to 17**
 - **Temple University enhanced study**
 - **Potential ties to increased cancer rates**
 - **Develop a historical exposure model**
 - **Horsham Township wrote letter of support and committed Township resources for the enhanced study**

- **House Bill 1410**
 - **Would redirect state tax revenue to pay for the costs of the water contamination**
 - **Has passed the House and the Senate**
 - **Rep. Todd Stephens updated Council on Nov. 4th**
 - **Go. Wolf signed into law on Nov. 27, 2019**

Recap of Drinking Water Efforts:

- Currently, **100%** of water serving the public system is either filtered or supplied by NWWA.
- As of this update, the system-wide average in the public system for PFOA/PFOS is **below detection levels (<2ppt)**. This is an average that is determined using a mass calculation formula.
- **HWSA has eliminated the PFC Surcharge on bills effective October 1, 2019.**
- Horsham Township continues to achieve more stringent water quality standards than those set by EPA and DEP.