

Horsham

Water Quality Update

July 8, 2020

Short Term Remediation Action Plan:

- HWSA has shutdown Wells 7, 9, and 21. All three wells remain in active status for emergency use and in order to perform monthly sampling.
- North Wales Water Authority: 600,000 to 625,000 gpd;
 - 2.4 ppt combined (April 2020 result)
 - 2.0 ppt combined (March 2020 result)
 - Non-detect (Feb. 2020 result)
- Aqua PA interconnect:
 - June 2nd test: 2.3 ppt combined
 - May 18th test: non-detect
 - May 4th test: 2.5 ppt combined
- Well 10:
 - Back in service on March 10th
 - DEP approved a 1 year extension of the pilot program to May 1, 2021.

Long Term Remediation Action Plan:

- Wells 2, 4, 19, 20 and 22 all in service with permanent treatment systems
- Aqua PA Interconnect:
 - Put back into service on Monday, June 8, 2020
- 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 100 for drinking water wells & 7 for non-drinking water wells (Navy - 102 and NGB - 5)
- 93 have been connected to the public system
- Another 2 are in the progress of being connected.
- One property owner requested an extension to accept offer due to COVID-19.
- 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 23.6 ppt combined.
- Influent monitoring:
 - December 2019 result was 18 ppt combined.
 - February 2020 result was 15 ppt combined.
 - May 2020 results was 98 ppt combined.
 - HWSA will be sampling in early July influent as well as the manhole to which HAGS discharges.

Stormwater Update: Navy Base

Pilot Test at former Aircraft Maintenance Hangar 680:

September 10, 2019 – Startup testing initiated. Treated water was stored until confirmation that discharge limits are met.

October 2019 to February 2020 – An investigation for the phenol detection was conducted.

February 20, 2020 – PADEP approved the temporary discharge (6-month) permit. Stored, treated water was discharged.

March 2, 2020 – Full-time operations commenced. More than 2.8 million gallons of water have been treated to date. Influent ranges from approx. 20,000 up to 35,000 ppt for PFOA and PFOS. The effluent meets all discharge requirements.

Ten additional extraction/monitoring points installed in April 2020.

An extension to the PADEP discharge approval, to operate after August 2020, will likely be requested.

Stormwater Update: Navy Base

2nd Pilot Test – Will be located near Horsham Road close to FAA radar

Pilot Test at former Fire Training Area (Site 5)

–The former fire training area (Site 5) has elevated levels of PFOA and PFOS in the groundwater, and is a likely source area due to historical activities.

–An in-situ bio-stimulation remedy is operating successfully to reduce VOCs.

- PFAS extraction wells and treatment cannot interfere with that remedy.

- Extraction wells will likely be between the VOC plume and the base boundary.

–The draft work plan is planned to be submitted to regulators in June 2020.

Stormwater Update: Navy Base

- A workplan for a PlumeStop Design Verification Test at the Northern Ponded Area was submitted to the EPA and PADEP in January 2020. The purpose of the study is to evaluate the feasibility of PlumeStop as a permeable reactive barrier (PRB) along the Keith Valley Road property line.
- PlumeStop is an in-situ (in ground) technology composed of very fine particles of activated carbon suspended in water through the use of unique organic polymer dispersion chemistry.
- The test is planned for a phased approach:
 - Phase I – Overburden groundwater and soil study
 - Phase II – PlumeStop injection test
- Phase I occurred in late March 2020. Results are being evaluated before Phase II can proceed.

Stormwater Update: Navy Base

- Other plans in development:

- Draft Sampling and Analysis Plan (SAP) for off-site groundwater monitoring wells.

- Draft prepared July 2019.

- Regulator comments received and being reviewed.

- HWSA has offered access to several observation wells.

- Currently coordinating scope of work and access with HWSA.

- Draft Sampling and Analysis Plan (SAP) for on-base groundwater wells and soil are anticipated in 2020.

Stormwater Update: Navy Base

The NASJRB storm water system was evaluated to locate portions where PFAS impacted groundwater may infiltrate and discharge to local surface water. Over two miles of storm sewer lines reviewed, using remote video inspections in the fall of 2018.

- A technical memorandum identifying leaking storm sewer lines was completed in March 2019. A copy was provided to the Horsham Township Library.
- The Navy has awarded a contract to carry out the report recommendations. Work began in November 2019 with video inspection of an additional 2 miles of sewer lines. The Tech Memo is being finalized.
- Repairs planned to commence in Summer 2020.

Stormwater Update: Air National Guard Base

PFOS/PFOA has been detected in surface water leaving the Horsham Air Guard Station. This water flows from a stormwater detention basin on the northwest boundary of the Base to Park Creek which flows to the Little Neshaminy Creek.

- ANG is taking actions to reduce this release of PFOS/PFOA to the Creek:
 - Revised Phase III system is in place and designed to treat 180 gallons per minute. Improvements to the stormwater basin are underway to retain some precipitation runoff to allow the system time to treat it.
 - When the NPDES permit is finalized, a permanent treatment system will be designed and built to meet the permit requirements.

Updates:

- **Navy and Air National Guard Restoration Advisory Board meeting:**
 - **September 16, 2020 at 6pm**
 - **It will be either held at the Horsham Township Library or be virtual depending upon COVID-19 restrictions.**

- **PA Department of Health:**
 - **Virtual meeting on July 9, 2020 at 7pm**
 - **Introduce the National Health Study and PADOH partners**
 - **Timelines**
 - **Community Assistance Panel formation**

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.