

# Horsham

# Water Quality Update

March 11, 2020

# 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: 600,000 to 625,000 gpd;
  - 2.1 ppt combined (Jan. 2020 test result)
  - 2.4 ppt combined (Dec. 2019 test result)
  - 5.4 ppt combined (Nov. 2019 test result)
- Aqua PA interconnect: shutdown on Oct. 7th and next time it is turned on it will be filtered
  - Jan. 20th test: 9.7 ppt combined
  - Jan. 6th test: 6.6 ppt combined
  - Dec. 18<sup>th</sup> test: 8.6 ppt combined
- Well 10:
  - HWSA has installed the 3rd anion exchange vessel to adsorb the PFHxA. HWSA is currently performing water quality testing and expects to put the well back in service the week of March 9th.

# Long Term Remediation Action Plan:

- Wells 2, 4, 19, 20 and 22 all in service with permanent treatment systems
- Aqua Interconnect: construction is completed. DEP inspection occurred on 1/17/2020. HWSA is submitting the operations permit application the week of March 9th.
- 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)
- 92 have been connected to the public system
- Another 3 are in the progress of being connected.
- Result validated for new additional well reported last month. Offer just issued by Navy to the property owner.
- 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 22.8 ppt combined.
- Influent monitoring:
  - September 2019 result was 18 ppt combined.
  - December 2019 result was 18 ppt combined.
  - February 2020 result was 15 ppt combined.

# Air National Guard Stormwater Management Update

- Warminster Municipal Authority agreement with the National Air Guard for treatment of stormwater
- Proposal is for a new permanent system and renovations to the existing basin
- Filters will be a combination of Organo Clay, Granular Activated Charcoal and Resin (ion exchange)
- Goal is for all water leaving the Air Guard Station to be under the 70 ppt limit.
- Goal is to treat between 500 and 600 gallons per minute.
- Goal is to be completed by the end of 2020.

# Navy Stormwater Management Update

## Navy Plan for Pilot Pump and Treat Plants

- Hanger 680 Site:
  - In Full operation
- 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.

# Navy Stormwater Management Update

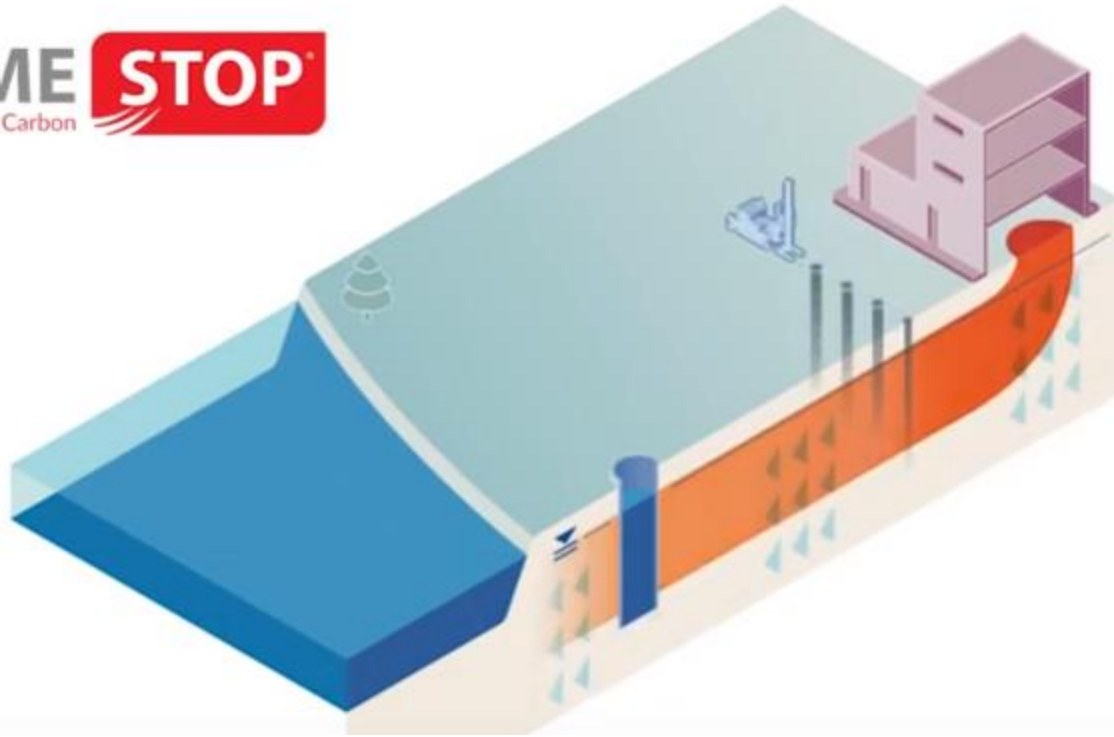
The Navy is working on a Design Verification Test for a Pilot Permeable Reactive Barrier in the northern ponding area.

A Permeable Reactive Barrier is a passive treatment technology designed to intercept and treat contaminants in the soil overburden.

Current status: Draft work plan under review by regulators

# PLUME STOP

Liquid Activated Carbon





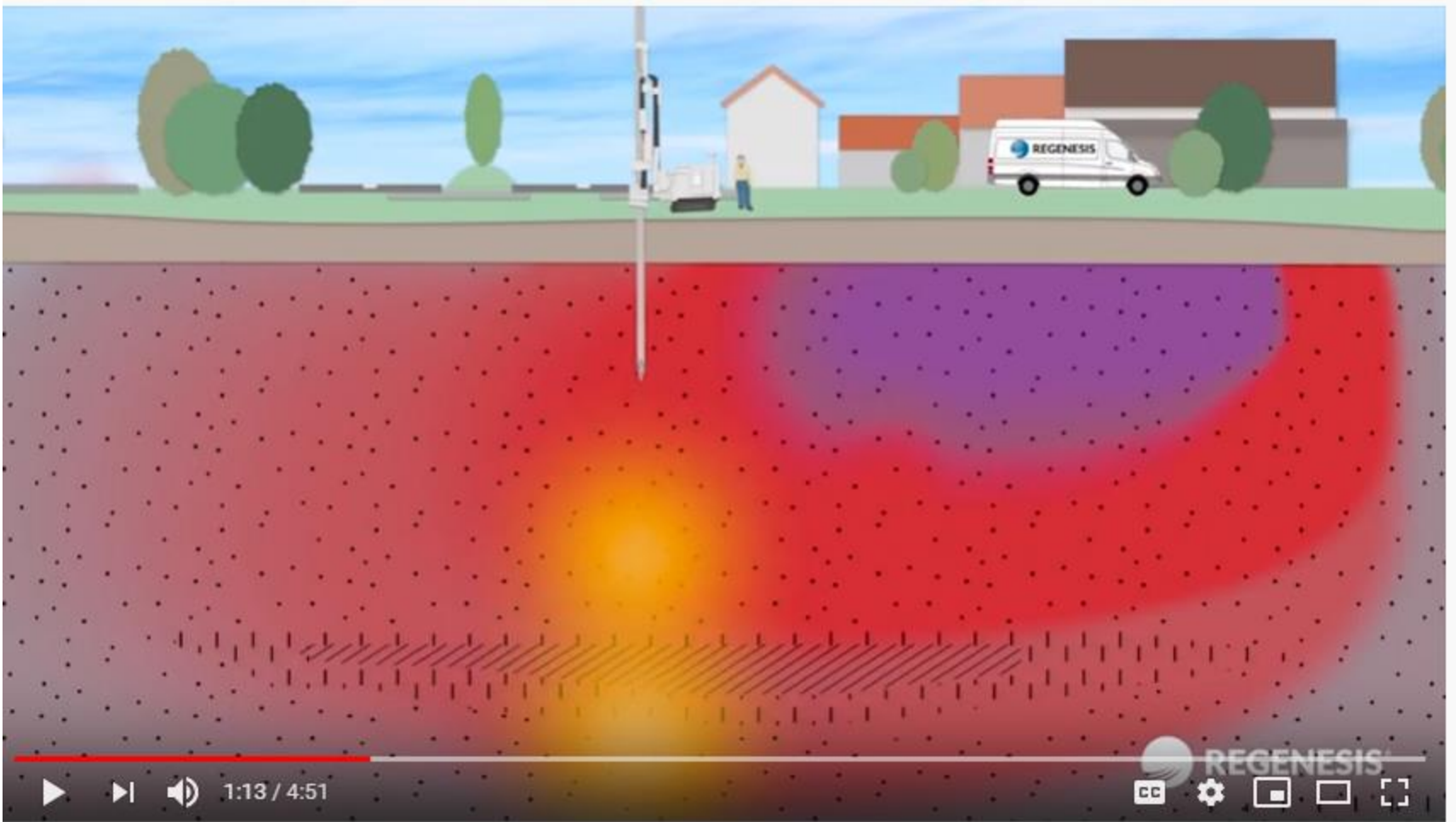




Figure 23. PlumeStop Dispersed Through Permeable Stratum

# Updates:

- **On Feb. 27, 2020, Aqua PA announced that it will make the necessary capital investment over the next several years to install mitigation technology at water treatment facilities where source water exceeds 13 parts per trillion for PFOA, PFOS and PFNA.**
- **Military Installation Remediation and Infrastructure Authority (MIRIA)**
  - **Allows state taxes generated on specific parcels to be directed to MIRIA to assist in reimbursement of the cost to remediate the PFAS contamination**
  - **Board's second meeting was held on March 6, 2020**
  - **Meetings with PA Dept of Revenue and water providers**
  - **Authority's application being delivered to PA Dept. of Revenue week of March 9th**
  - **Grant applications by water providers and municipalities due by May 15th**
  - **Local effort amounts due before June 1st**
- **ATSDR is planning to release their Letter Health Consultation report very shortly, possibly as soon as the end of this week.**
- **Navy and Air National Guard Restoration Advisory Board meeting:**
  - **Wednesday, March 18th from 6pm to 7:45pm at the Horsham Township Library**
- **PA Department of Health meeting:**
  - **Wednesday, March 18th from 7:45pm to 8:30pm at the Horsham Township Library**
  - **Results of 2019's environmental testing**
  - **Update on the National Multi-site Health Study**

# 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.