

Horsham

Water Quality Update

July 12, 2017

Short Term Remediation Action Plan:

1. Temporary Treatment Systems at Wells 10, 17 and 21
2. Permanent Treatment Systems at Wells 26 and 40
3. Shutdown all other wells except keep Well 7 in operation
4. North Wales Water Authority increase to 1.2 million gpd
5. Possible suspension of Aqua PA Interconnection

Short Term Remediation Action Plan Update:

1. Temporary Treatment Systems at Wells 10, 17 and 21:
 - Well 10 no change since last update
 - Carbon replacement at Well 17 to be complete by end of July 2017.
 - Carbon replacement at Well 21 was completed on June 20th.

Short Term Remediation Action Plan Update:

2. Permanent Treatment Systems at Wells 26 & 40:

- Replacement of carbon at Well 26 is scheduled for July 12th
- Replacement of carbon at Well 40 was completed on July 6th
- HWSA has received some calls from customers regarding discolored water.
 - The HWSA Board will be receiving at their July 24th meeting for consideration a recommendation and probable costs to reline and/or replace water mains in affected areas of the system served by older unlined cast iron mains.
 - The discolored water is not from the wells; it is believed to be caused by changes in flow patterns in areas served by older mains as wells are suspended from service and other sources are brought on line.

Short Term Remediation Action Plan Update:

3. Shutdown all other wells except keep Well 7 in operation:

- Currently, all wells except Well 7 are suspended from service.

4. North Wales Water Authority:

- Currently at the maximum of 1.2 gpd

5. Aqua PA Interconnect:

- Currently at 225,000 gpd but increased 400,000 gpd in mid-June for a short time while Well 17 was shutdown

Other Factors:

- PADEP Permit conditions
 - Well 10 permit conditions
- Changes in drought status
- Demand changes: average demand will now be changing due to increased summer demand
- Chlorine Residual
- Water Main Breaks

Other Factors:

- Longer run times on wells.
 - Normal run time is usually 14 hours a day.
 - Well 7 is now running 19 hours a day.
 - All other wells running around 16 hours a day.
- Quality control of lab analytical results
- Declines in production yields
 - Well 21 - had to install smaller pump in order to accommodate temporary treatment
 - Well 40 - decrease in yield due to sealing upper 100' of well, currently yield loss is in excess of 100,000 gpd
- Mechanical breakdowns and/or routine maintenance requirements at active sources
- Factors including but not limited to those above will necessitate operational changes over the course of the short term plan

Private Wells:

- Navy:
 - 450 private wells have been sampled
 - 91 tested above the EPA LHAL 70 ppt (1 recently removed is below HAL)
 - 68 have been connected to public system
 - 3 properties owners have rejected the offer
 - 2 have not accepted nor rejected the offer
 - 4 are already connected & only require well abandonment
 - 4 properties pending connection upon completion of the Phase II water main extension project
 - 5 are delayed due to well abandonment issue
 - 2 connection offers expected to be issued this week
 - 78 tested between 40 and 70 ppt
 - Phase II of water main extensions: the water main is nearing completion and will soon start to connect the homes this week to the public system
 - Phase III of water main extension and numerous other connections are waiting for the agreements from the Navy to be completed
- Air National Guard:
 - 4 private wells have been sampled
 - 4 have been connected to the public system

Long Term Remediation Action Plan:

1. Convert temporary treatment systems at wells 10, 17, & 21, to permanent treatment systems.
2. Permanent Treatment System on five additional wells: Wells 2, 4, 19, 20 & 22.
3. Permanent Treatment System on the Aqua PA interconnection
4. Additional interconnection with North Wales Water Authority
5. North Wales Water Authority: 600,000 gpd
6. 1.8 miles of new water main to make public water available

Long Term Remediation Action Plan:

- PennVest Board awarded the \$10M grant on January 25, 2017.
- All bids have been awarded and contracts signed for the projects.
- HWSA received waivers of land development at the June 26th Council Meeting.
- PennVest settlement occurred & was completed on July 6th.
- HWSA will be setting up residential meetings to meet with the neighbors regarding the upcoming construction as well as getting notices to proceed with construction

Recap of Drinking Water Efforts:

- Treatment systems were installed on five planned wells by the end of 2016
- Currently, approximately 86% of water serving the public system is either filtered or supplied by NWWA.
- The combined concentration of PFOS/PFOA from all sources currently supplying the public system is approximately 2 ppt.
- Other sources which remain in service are those with the lowest detected levels of PFOS/PFOA based on increased monitoring since adoption of the short term plan last year.
- Will continue to purchase water and rely on a mix of sources to ensure our residents have a safe and adequate supply.
- Will continue to test filters in accordance with DEP operations permits.
- Horsham Township continues to achieve more stringent water quality standards than those set by EPA and DEP.

Wastewater:

- Wastewater sampling at the Horsham Air Guard Station (HAGS):
 - HAGS wastewater discharge permit limit is 300 ppt combined
 - August 2016 sample 3,600 ppt combined
 - December 2016 sample 197 ppt combined
 - Feb/March 2017 sample 250 ppt combined
 - The HAGS wastewater discharge permit expired on June 30, 2017. HWSA has advised HAGS that new/extended permit is required. Situation under review by the National Guard Bureau.
- Effluent monitoring results at the Park Creek Sewage Treatment Plant are currently averaging **27** ppt combined vs. results from earlier 2016 which averaged over 200 ppt combined
 - Last two test results showed non-detect for PFOS.

Stormwater:

- A temporary plan has been developed and approved to divert and treat the stormwater on the Horsham Air Guard Station. Project received approved funding the week of June 5th.
- The Navy has closed off two artesian wells.
- The Navy is moving forward to seal off five (5) outfalls on north side of Base (Keith Valley Rd). Some initial work has started.
- The Navy is also looking to removal soil around the former Fire Station on Base.

Looking forward:

- Continue communication to the residents
- Adjust short term plan through various operational changes as necessary based on fluctuations in demand or as necessitated by other system conditions e.g. main breaks, flushing, chlorine residual
- Continue to work with PennVest to secure the funding to assist with the implementation of the long term plan
- Continue to meet, lobby and work to address the storm water run off from the bases
- Continue to lobby to receive reimbursement of costs and full funding relating to the contamination. New letters seeking reimbursement will be mailed shortly.
- Continue towards implementation of the long term plan

Looking forward:

- Continue towards implementation of the long term plan
- Continue following any Federal and/or State Legislation regarding PFOA and PFOS
- Continue following any research and/or information regarding possible new treatment methods for PFOA and PFOS

Communication:

- Monthly updates at Council's second Wednesday public meetings
- Township website: www.horsham.org
- HWSA website: www.horshamwater-sewer.com
- Water hotline: 215-907-0034
- Follow us on Twitter at @HorshamTownship
- Like us on Facebook at Horsham Township
- Sign up for email updates at water@horsham.org