

# 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](http://www.horsham.org)
- HWSA website: [www.horshamwater-sewer.com](http://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](mailto:water@horsham.org)