

# Horsham

# Water Quality Update

May 10, 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:
  - Wells 10, 17 and 21 are back in service and pumping filtered water into the public system.
  - Carbon replacement at Wells 17 & 21 is planned for late May/early June in advance of the summer demand.

# Short Term Remediation Action Plan Update:

## 2. Permanent Treatment Systems at Wells 26 & 40:

- Wells 26 and 40\* are back in service.
- Carbon replacement at Wells 17 & 21 is planned for late May/early June in advance of the summer demand.
- Changes in system operations have altered flow patterns in the system resulting in discolored water in isolated areas. Water from the well is not discolored. The Authority and Aqua are investigating.

\*Well 40 production has declined by approximately 84,000 gallons per day due to sealing of upper portion of well. This represents a loss of capacity that was not contemplated in development of short term plan.

## 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 increase to 1.2 million gallons per day:

- Currently purchasing in the range of 1.0 million gpd
- Will adjust based on fluctuations in demand, up to a maximum of 1.2 million gpd

5. Aqua PA Interconnect:

- Currently at 225,000 gpd

# Other Factors:

- PADEP Permit conditions
  - Well 10 permit conditions
- Changes in drought status
- Demand changes: average demand will now be changing due to increase summer demand
- Chlorine Residual
- Water Main Breaks
- Quality control of lab analytical results
- Declines in production yields
- 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
    - 63 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
    - 7 require water main extensions and/or easements
    - 5 are delayed due to well abandonment issue
    - 5 properties in various stages of connection process
    - 2 connection offers expected to be issued this week
  - At least 3 connections above are not funded under current Navy CA, awaiting modification approval
  - 78 tested between 40 and 70 ppt
  - Contracts for Phase II of water main extensions were executed May 8<sup>th</sup> and construction is anticipated to begin in early June
- Air National Guard:
  - 4 private wells have been sampled
  - 4 have been connected to the public system
  - 1 well, which is not residential & not currently used, needs to be sampled

# Long Term Remediation Action Plan:

1. Continued use of treated wells funded by the Navy: Wells 10, 17, 21, 26 & 40.
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.
- Seven bids were received for the treatment systems.
- Nine bids were received for almost 2 miles of water main extensions.
- Four bids were received for the additional NWWA interconnection.
- HWSA awarded all contracts on May 8th.
- PennVest settlement is tentatively scheduled for June 8, 2017.

# 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
    - Transition to new water treatment facility is believed to be the cause of increase
- Effluent monitoring results at the Park Creek Sewage Treatment Plant are currently averaging **28** ppt combined vs. results from earlier 2016 which averaged over 200 ppt combined

# Stormwater:

- A temporary plan has been developed and approved to divert and treat the stormwater on the Horsham Air Guard Station. Air Guard Station currently is working on obtaining funding for the project.
- The Navy is moving forward to seal off five (5) outfalls on north side of Base (Keith Valley Rd). Work started on May 3rd and is to take about 4 days.
- 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
- Continue towards implementation of the long term plan

# 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)