

Water Quality & GCS Water Testing



Monday, August 6, 2018

Greensboro's Drinking Water & Emerging Contaminants

PFOS / PFOA

- Detected in 2014 as part of UCMR 3 study
 - Drinking water quarterly sampling (including interconnects) since 2016
 - May 2018 – Began monthly sampling and posting results in monthly water quality report
- Council approved investigation in 2015
 - HDR Engineers and NC State University
 - Field investigation started in 2016
 - Primary Source - Area surrounding and including PTI
 - Investigation wrap-up and final report by year end
- PFOS / PFOA Health Advisory
 - 70 ppt individually or combined
 - Lifetime Consumption, not Short Term Measure



Emerging Contaminants Cont.

HAL Exceedance

- July combined PFOS and PFOA sample results for Mitchell WTP - 80 ppt
- First report trigger since monitoring began in 2014
- State contacted - public notification

Exceedance Response Measures

- Operational Response Protocol Developed
 - Utilization of Townsend WTP and interconnects to minimize / curtail flow from Mitchell WTP
 - Resampling and external communications
 - Temporary Powdered Activated Carbon (PAC) feed system utilization planned online for mid-September



Emerging Contaminants Cont.

Other Proactive Measures

- Granular Activated Carbon (GAC) Pilot Testing completed – final report received 4/2018
 - Treatment effective for removing PFOS and PFOA
- Source identification Stakeholder Meetings
 - Voluntary Chemical Inventory
 - Identify alternative product for training purposes
 - Contact city and contain / treat releases due to emergency response
- Potential Predictive Model
 - Consultant evaluation of correlation between upper watershed samples and treatment plant intake



Emerging Contaminants Cont.

Water Quality and Safety

- Greensboro's water exceeds all water quality standards
- Commitment to proactively monitor all potential sources of contaminants within the City's water supply in order to maintain our standard of providing high quality drinking water



Customer Commitment

Highest Drinking Water Quality

- Meet and Exceed Water Quality Standards
 - Assurance through operations, extensive testing, and third party validation
- Uphold consumer confidence
 - Transparency
 - Proactive and Precautionary Responsiveness
 - Staff availability regarding concerns
 - Townsend Water Quality Lab – (336) 373-7527



GCS Sampling – Lead & Copper

Proactive and Successful Partnership with Guilford County Schools

- Historic collaboration with GCS, High Point, Jamestown, Burlington and Winston-Salem
 - Validate corrosion control program and confirm safety of water inside GCS facilities
- Sampling Protocol – EPA Technical Guidance Document
 - 3T Rules For Reducing Lead in Drinking Water in Schools (October 2006 version)



GCS Sampling – Lead & Copper

- 109 facilities sampled in February of 2018
 - Schools and administration buildings sampled
 - One representative sample per facility taken by GCS staff
 - Reference sample taken from main outside each facility
- Very encouraging sample results (2.8%)
 - Three schools had results above the action level of 20 ppb
 - Southeast Middle, Allen Jay Elementary and Frazier Elementary School
 - GCS promptly replaced the fixture in the three facilities
 - Retesting results - less than the laboratory detection limit
 - Results better than Atlanta Public Schools (3%) and Chicago Public Schools (2.9%)

