Arkansas AWOP

Program Update

February 19, 2020 - June 3, 2020

Supervisors: Craig Corder, P.E.  Chris Roberts, P.E.  Aaron Hilborn, P.E.

Engineers: Shada Roberts, P.E.  Robert Reaves  Tanner Burns

DBP Engineer: Callie Acuff  Specialist: Joshua Hines
Assisted Nashville Waterworks and Nashville Rural Water Authority with DBPs

Nashville RWA purchases water from Nashville Waterworks and has a large distribution system

Reviewed:
- Chlorine feed locations
- CT credit and calculations
- Tank data from SCADA for turnover/mixing analysis
- Master meter and pump station locations
- Distribution chlorine and DBP samples
- Update distribution system on state GIS utility map
March 11, 2020
Brady Mtn SWTP Start-Up

- Site visit to provide state and federal regulatory guidance due to lack of review and approval before construction

- What is Plant Capacity?
  - Per manufacturer - 60 GPM
  - Raw Pumps - 25 GPM throttle to 16 GPM

- Per Ten States
  - Rapid Mix - 756 GPM
  - Floc Basin - 20 GPM
  - Sedimentation - plate settler info unknown
  - Filter - 35 GPM

- High Service Pumps - 46 GPM

- CT calculated using 25 GPM in 4 inch main to first outlet
  - Unable to confirm 3” or 4” main
  - Main splits closer outlet and more facilities north of plant
  - Requesting plan drawings to clarify distribution
March 17, 2020
James Fork Regional/Milltown-Washburn Water TA Visit

- DBP Technical Assistance for Milltown-Washburn Water – longstanding DBP issues, buys from James Fork Regional Water
  - Toured James Fork plant to look at potential DBP reduction strategies in treatment process
  - Distribution system sampling to create chlorine and THM+ profiles
  - Exploration of options for flushing improvements for Milltown-Washburn
  - Follow-up site visit will be conducted in the future when travel is allowed.
March 20, 2020 - Today
Limited Travel and Reduced Staff

- On March 20, high risk employees (age 65 and above or have one of 13 health issues) are sent home. ADH staff are considered essential, and the people that were not high risk have been taking on additional tasks to prevent productivity loss.

- On March 23, due to Covid-19, travelling to perform surveys and provide technical assistance stopped unless considered critical (ex. Level 2 Assessments, Significant Deficiencies, etc.)

- Effective June 1, it became voluntary for high risk employees above 65 years of age to return to work if they did not have other high risk factors.

- Technical assistance has been limited to email correspondence and researching upcoming assistance visits.
March 31, 2020 and April 21, 2020
CAW Wilson WTP

- Preliminary meeting with consultants on upgrade from 100 MGD (winter) and 133 MGD (summer) to 150 MGD year-round.
  - Will have to perform pilot study simultaneous with filter upgrade
- Sedimentation basin will not treat water as well in winter as it will in summer currently
- Plan to increase filter rate from 4.0 (gpm/sq. ft.) to 5.0 (gpm/sq. ft.)
- Currently no approved surface filters above 4.0 in Arkansas
  - Will have to perform pilot study simultaneous with sedimentation basin upgrade
New Addition to AWOP Team!

- Tanner Burns added to AWOP/CCCP technical assistance team
- Chemical Engineer from University of Arkansas in Fayetteville
- Recording surface water turbidity data for 2020 into a worksheet
  - 45-50% complete
- Technical assistance team fully staffed
  - 3 Engineers
  - 1 Health Specialist
- Joshua Hines recording surface water turbidity data from 2019 into a worksheet
  - 70-80% complete
May 20, 2020
Magnolia SWTP Start-Up

- Lake Columbia infested with Giant Salvinia
  - PWS partially drained lake and fed chemical to kill invasive plant on May 5, 2020
- Test results for chemical came back negative May 20, 2020
- PWS intends to start-up SWTP
- WTP has TOC removal issues
  - Raw water AVG = 8.18 mg/L
  - Fin water AVG = 3.92 mg/L
  - Recommended Goal = 1.5 mg/L
    - For DBP Control