SMALL SYSTEMS TAC BOARD MEETING HARRISBURG, PA

MAY 26, 2015

Impact of Pre-Draft Chapter 109 Revisions:

The Impacts Are Complex and Require Proper Vetting



PRESENTER

David Lewis

- Professional engineer in PA, MD, NJ, WV and MA
- Licensed water and wastewater operator
- Vice President and General Manager
- Over 25 years experience in water and wastewater industry
- B.S., Engineering, Penn State



COLUMBIA WATER COMPANY

- Small investor owned company
- Incorporated 1823
- 17 full time employees
- One surface water plant and 3 ground water sources
- 10,000 customers in 3 boroughs and 4 townships
- 100 miles of water main
- 9 storage tanks / 10 pressure zones / tank mixers / flush annually
- Disinfectant is chlorine
- 5 existing chlorine booster stations
- Average daily demand is 2.0 MGD



PURPOSE OF PRESENTATION

- Provide input to TAC Board on impacts of changes on small water utilities
- Highlight the complexities of the impacts
- Request that the process be given proper vetting



PUBLIC NOTIFICATION IMPACTS

- 32 Total Coliform samples collected each month
- Current minimum chlorine residual = 0.02 mg/L
- Proposed minimum chlorine residual = 0.30 mg/L
- In 2013, under these new requirements 34 public notices
- In 2014, under these new requirements 37 public notices
- One positive Total Coliform sample each in 2013 and 2014
- No positive E. coli samples
- Issuing 3 notices per month will cause alarm
- Customers will use unregulated springs, bottled water or install unnecessary in-home treatment devices



FLUSHING

- Flushing does not always increase chlorine residual
- Flushing creates distrust and concerns
- Flushing is wasteful of a limited resource
- Flushing is harmful to the environment
- We anticipate the need to install at least 15 automated flushing stations to comply with the proposed regulation change
- Estimated cost: \$20,000 per station w/ dechlorination capability
- Will need to visit daily



CHLORINE BOOSTER STATIONS

- Substantially increasing chlorine residuals will create
 - more DBPs
 - more taste and odor complaints
 - more chlorine handling safety and security incidents
 - more public exposure to the transportation and storage of chlorine
- We anticipate the need to install 5 additional chlorine booster stations to comply with the proposed regulation changes
- Estimated cost: \$250,000 per station w/ land acquisition
- Will need to visit each station daily



WHAT AM I ASKING OF YOU?

- Be the voice for every water customer in PA
- Be the voice of the small water utility
- Provide technical advice based upon sound science
- Insist that this regulation change be vetted properly
- Thoroughly understand the complexities of this before approving a change that will impact millions of people
- Demand scientific evidence showing how the current chlorine residual regulation is flawed or causing public health issues
- Know why the draft regulation required a free chlorine residuals of 0.5 mg/L then suddenly was changed to 0.3 mg/L
- Understand the health risks associated with ingesting high levels of chlorine



WHAT AM I ASKING OF YOU?

- Know if subjecting all water customers to higher levels of DBPs, lead and copper out weigh an unknown and undefined risks to a very very small customer population
- Know if the cost (both in health and capital) to significantly raise the chlorine in all water systems is more beneficial than addressing a very specific premise plumbing issues



CONCLUSION

In our advanced society, we don't:

- radiate the entire body to kill cancer in an isolated spot;
- put Roundup on the entire yard to kill one weed; and
- pave all our roads to fix one pot hole

We should not subject our children, the elderly, those with illnesses and our overall population to increased disinfectant levels and DBPs to try to solve an undefined problem that has an unknown risks.

This won't impact water providers nearly as much as it will the customers. Many will demand answers, and the answers better be based upon sound science.

