

• 1.) Test Equipment & tools. • 2.) Vehicle. • 3.) Insurance. What is the • 4.) Licensure. • • 5.) Continuing Education. Private CCC • 6.) Municipal involvement. Provider • 7.) Customer Management. Managing? • 8.) Data Management. 9.) Time Management.10.) Profitability/loss. • 11.) Medium Size – Staff of 1 – 2.

1.) Work environment. Cross <u>Connection</u> Control 2.) The System & Strategic Planning **Programs** Public 3.) Managing the Workflow

3

1

Vision -To be THE World-Class Water Utility where Excellent **Products** and Services are Always on TAP!

Who are Purveyor Personnel -Maryland LARGE Purveyor Data **Purveyor Staff Breakdown** ■ Utility Services Eng. & Construction ■ Production 29% Logistics Customer Relations ■ Management Computer Finance ■ Audit

WSSC University of Florida TREEO **Cross-Connection Control Conference** February 28, 2019 WSSC CROSS **CONNECTION CONTROL** and BACKFLOW PREVENTION

Who We Are

Chip Matthews

Cross-Connection Program Section Manager

WSSC - Washington Suburban Sanitary Commission located in Laurel, Maryland

Largest water/wastewater utility in Maryland State

1.8 million customers, 450,000 customer accounts

100 Years of Service to the Community



WSSC's CCP History continued

- Plans Review and Inspection Staff did an excellent job of ensuring proper protection at the time of new construction; but what about follow-up?
- Late 90's, State recognizes importance by regulating that Cross Connection Technicians Certifications are a prerequisite to Journeyman and Master Plumber Licenses.
- In early 00's, WSSC was forced to focus resources on Sanitary Sewer Overflows $\,$
- Frustrations boil over: "Why are they more concerned with Crisco in the sewer, than with Cyanide in the Water?"





How do you contaminate the drinking water? Actually, it's very easy:

Elementary Level Physics!!!





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Really? No Protection?



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How Long Can You Avoid



Its Time to Take Another Stand

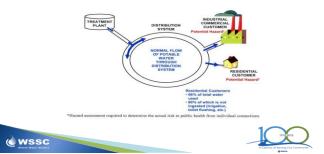
- > This is about where we come into picture.
- WSSC is Under Sweeping Changes
- > New Mid-level Management seems receptive to enhancing the CCP
- With mid-management in support, we set out to impress backflow fundamentals to our senior management and clarify the risks inaction.
- > We enhanced and presented the next four slides:

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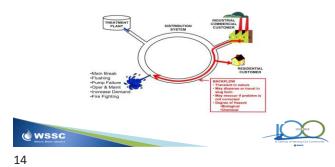


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Normal Water Flow

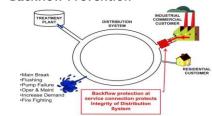


Backflow



Backflow Prevention

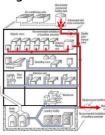
What? It has an AVB!







One Example of a Tragic Incident



- A cross-connection incident occurred in a Medical Center in Illinois
- Ethylene glycol, an anti-freeze added to air conditioning cooling tower water, entered the potable water supply system via a manually-operated valve that was intentionally left partially open
- No Backflow Prevention Assembly was present
- Two of six dialysis patients died as a direct or indirect result of the contamination



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- > Self Funded, Phased-in Approach







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What Also Got Their Attention

→ Federal and State Mandated

- **→** Gross Negligence = Liability
- → Benchmarking
- Our new GM lived through a significant backflow event in his former jurisdiction

Lessons Learned

- > Phase In But not to slow or you may lose opportunity, support, or interest
- We have focused too much on surveys
 Considering a late fee for annual testing
- Funding by all ratepayers
- Test Report & Base Fees
 General Fund to cover balance
- Line item fees are problematic
- When phasing in your will be under funded

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Wrap Up

- Questions
- → WSSCWater.com
- https://www.wsscwater.com/xconnect
- → Thank you for attending today
- And a special thanks for your role as a public service official, service provider, and especially the Veterans!

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Learning Points

Private/Public CCC Programs have a lot in common:

- Challenges are complex.
- Issues exist in both types scope and scale of issues are naturally different.
- Professionals try their best to educate
- Professionals try for Best in Class Service
- You are working with the Public
- Managing varying perspectives and viewpoints