

# Compliance Workshop

## Tuesday, October 18, 2016

### Backflow Update



*Curtis L. Truss Jr., OTCO*



Contribution from previous presentations:

Jess Jones, OTCO

Dick Lykins, OTCO

Gary Espenschied, OTCO

Dr. Ashley Bird, OEPA



# Backflow Update

- Backflow Regulations were first instituted July 1, 1972.
- Can be a requirement for system upgrades

# Backflow Update

- 1969 – Ohio Approves the Reduced Pressure Assembly
- 1972 – Became Law & was Adopted by ODH to Regulate Backflow Prevention in Ohio
- 1972 – Personnel From ODH & ODNR Become Core of Ohio EPA (10/23/72)
  - Jim Haywood Heads the Backflow Prevention Program
  - Ohio EPA Adopts Legislation Which Later Becomes OAC 3745-95



# Backflow Update

- 1972 – Ohio EPA Requires the I-71 Corridor Cities to Implement a Backflow Prevention Program
  - Cincinnati – Columbus - Cleveland

# Backflow Update

- 1976 – Ohio EPA Creates “Manual of Backflow Prevention & Cross-Connection Control”
- 1979 – ODH Initiates the “Certified Backflow Tester” License Program
  - Must be a Plumber to Attend
  - Little Interest by Plumbing Trades
- 1982 – Chlorination of All Public Water Systems is Required by Ohio Law
- 1983 – Dr Ashley Bird is Given the Responsibility for the Ohio EPA Backflow Prevention Program



# Backflow Update

- 1994 – First Backflow Prevention Training Program was Created for Water Suppliers by OTCO at the Request of Dr Ashley Bird
  - Support & Input By the Following
    - Dr Ashley Bird
    - Richard Lykins
    - Ralph Mohr
    - Steve Skinner
    - Jess Jones
    - John McCreight
    - Larry Short
    - Curtis Truss
- 1995 – Over 150 Water Supply Employees Attended the Training That First Year & Resulted in Increased Backflow Prevention Programs

# Backflow Update

- 1996 – Plumbing Trades Are Now More Interested in Becoming Certified
- 1995 – ODH Backflow Prevention Section Moves to Ohio DOC
- 1998 – Ohio Adopts the International Plumbing Code
- 2000 – ODOC Requests OEPA & OTCO Participation on Their Ad Hoc Backflow Prevention Advisory Committee
  - Represents a Handshake Between ODOC, OEPA & OTCO
  - Cooperative Effort Initiated & Led by Ralph Reeb of Ohio DOC



# Backflow Update

- 2001 – Water Supply Employees Can Take the ODOC “Certified Backflow Tester” Examination After Attending the OTCO Training
- 2003 – ODOC Proposes New Legislation
  - Senate Bill 179
  - Would Restrict “Certified Backflow Tester” License to Plumbing Trades
  - Would Require All Backflow Preventers to be Tested by a “Licensed Person”
  - Would Eliminate Water Supplier Authority Over Containment Testing

# Backflow Update

- 2003 – OEPA, ORWA, OAWWA & OTCO Opposed the Proposal
- 2003 – United Effort on Water Supply Side
  - Dr Ashley Bird, OEPA
  - Kevin Strang, ORWA
  - Curtis Truss, OTCO & Vice President of AWWA
  - Jess Jones, OTCO



# Backflow Update

- 2003 – Multiple Meetings Held to Protect the Authority, Responsibility & Liability of the Water Supply Community
- 2003 - After Several Failed Attempts, a Mutually Acceptable Resolution is Reached
- 2004 – Legislation Expected to Become Law

# Backflow Update

- Water Supplier Retains Authority Over Containment
- ODOC Retains Authority Over Isolation
- ODOC Satisfies Their Need to Charge Fees for “Certified Backflow Tester” License
- Codifies What They Have Been Doing Without Legal Authority for 24 Years
- Ad Hoc Advisory Committee Continues



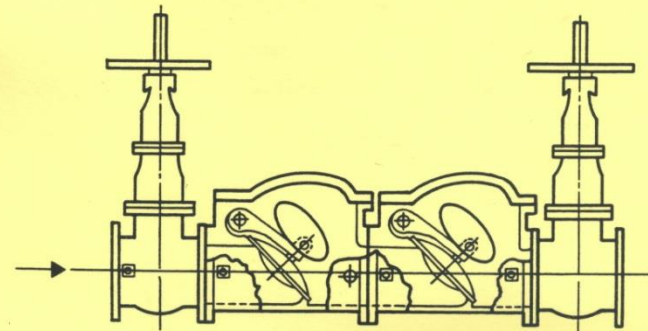
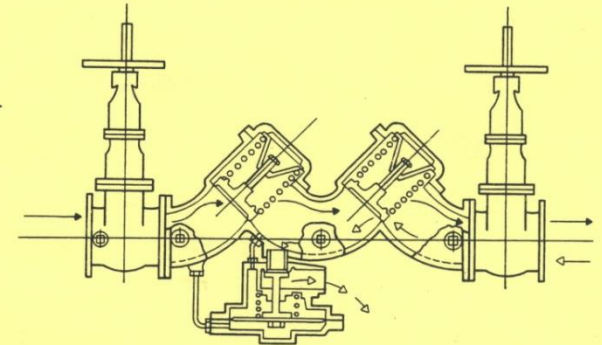
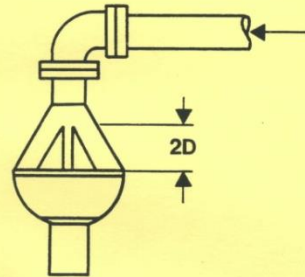
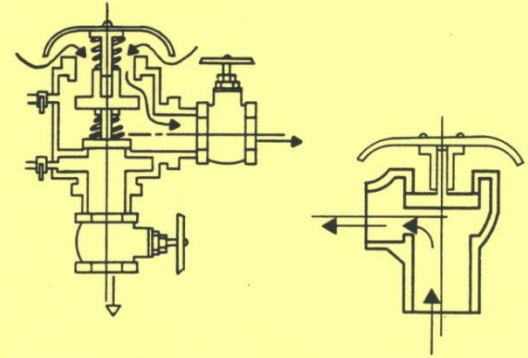
**OhioEPA**

State of Ohio Environmental Protection Agency

division of  
public water supply

**backflow  
prevention  
and  
cross-connection  
control**

third edition-1987  
revised-1990



# OEPA's Backflow Manual Prior to October 25, 2015




Division of Drinking and Ground Waters

# **Backflow Prevention and Cross-Connection Control**


Fourth Edition – 2015





This is a manual of good engineering practices for the protection of potable water systems from contamination by backflow. It is specifically written for use in Ohio, incorporating the laws and administrative rules of the State of Ohio. This manual is also intended for use as a self-training manual for water supply personnel and others involved in cross-connection control.


Although this manual discusses all aspects of backflow prevention and cross-connection control, its main emphasis is promoting Ohio EPA's mission and assisting public water systems in protecting public water supplies.



Material contained herein referencing protection of the consumer's water system plumbing, is for informational purposes only.

The reader, if performing under the purview of the Ohio Department of Commerce, should reference the Ohio Department of Commerce's, Division of Industrial Compliance, Construction Compliance manual, "Backflow Prevention and Cross-Connection Control Manual: For the Education of Ohio Certified Backflow Prevention Technicians" for guidance.





The supplier of water shall conduct or cause to be conducted an initial assessment and periodic surveys or investigations of water use practices within a consumer's premises to determine whether there are actual or potential cross-connections to the consumer's water system through which contaminants or pollutants could backflow into the public water system or determine where in the judgment of the supplier of water, a pollutional system, health or severe health hazard to the public water system exists.

To meet this requirement, the supplier of water shall conduct or cause to be conducted an on-site investigation of all premises at least every five years to identify changes in water use practices at the consumer's property so that new or increased hazards to the water supply are identified and mitigated.

In lieu of conducting an on-site investigation of all premises every five years, the supplier of water can document, in writing, an alternate, on-going, methodology to identify changes in water use practices that may represent a new or increased hazard to the public water supply.



# CHECKLIST FOR A GOOD BACKFLOW PREVENTION PROGRAM

In order to ensure a public water system has and maintains an adequate backflow prevention program, the following components will be addressed during a system's sanitary survey by the field office staff of Ohio EPA. A public water system must have these components addressed and be ready to discuss them at the time of a survey:

- 1) Does the water system have a cross-connection control ordinance or other legal mechanisms that are used to control cross-connections? (Indicate all mechanisms used.)

# CHECKLIST FOR A GOOD BACKFLOW PREVENTION PROGRAM

2. Does the cross-connection control program include the following:
  - a. Requires installation and operation of appropriate type of approved backflow preventer?
  - b. Provides right-of-entry for inspection?
  - c. Conducts inspections/tests for all installed backflow preventers every 12 months?
  - d. Enforces discontinuance of service to any facility where suitable or operable backflow preventers have not been provided for a cross-connection?



# CHECKLIST FOR A GOOD BACKFLOW PREVENTION PROGRAM

2. Does the cross-connection control program include the following:
  - e. Require appropriate protection and inspection of all other booster pump installations?
  - f. Ensure that customers with auxiliary water systems (i.e. private wells) have the appropriate backflow protection and inspection?

# CHECKLIST FOR A GOOD BACKFLOW PREVENTION PROGRAM

- 3) Who does the water system accept to perform the every 12-month inspection on the backflow prevention assemblies?
- a. Department of Commerce Certified Tester
  - b. OTCO Certified Tester
  - c. Licensed Plumber
  - d. PWS Personnel
  - e. Other



# CHECKLIST FOR A GOOD BACKFLOW PREVENTION PROGRAM

- 1) Does the cross-connection control program include the following:
  - a) Requires installation and operation of appropriate type of approved backflow preventer?
  - b) Provides right-of-entry for inspection?
  - c) Conducts inspections/tests for all installed backflow preventers every 12 months?
  - d) Enforces discontinuance of service to any facility where suitable or operable backflow preventers have not been provided for a cross-connection? Require appropriate protection and inspection of all other booster pump installations?
  - e) Ensure that customers with auxiliary water systems (i.e. private wells) have the appropriate backflow protection and inspection?

