Backflow Prevention Program for the Future
Why have a Backflow Prevention Program?

To ensure that the drinking water continues to stay safe all the way to the customer
Backflow Prevention Program for the Future

Seven components to a successful Backflow Prevention Program

1) Training & Education
2) Establish Legal Authority
3) Standards & Specifications
4) Construction Plan Review
5) Surveying New/Existing Facilities
6) Testing & Maintenance
7) Record Keeping
Training & Education

What type of training?

What is a cross Connection?
How does backflow occur?
How to run a program
Methods of backflow prevention
  What is a Device? What is an Assembly?
How to test a backflow prevention assembly
Training & Education (cont.)

Who needs to be trained?

- Program Administrator
- Leadership
- Employees
- Testers
  - State Accredited?
  - “Operator in Responsible Charge” trained and approved?
- Irrigation Contractors
- Plumbers
- Interconnected Water Systems
Training & Education (continued)

Training Sources

- TREEO
- USC FCCC & HR
- ABPA

Standard industry practices and recommendations
AWWA and the M-14 manual
Establish Legal Authority

What does legal authority look like?
Ordinance, written authority
  • Don’t reinvent the wheel
  • Consult other ordinances
  • Look at the EPA Model ordinance

Who will oversee the program?
  • Operator in Responsible Charge?
  • Assistants?
Establish Legal Authority (cont.)

What will enforcement look like
   Will there be the authority to enter premises/conduct inspections?
   Will there be fines? connected to water billing?
   Who has the authority to disconnect water service for Domestic, Commercial, Industrial and *Irrigation

Who will be empowered?
Standards & Specifications

Standards Operating Procedures

Written procedures for:
- Acceptance of testers
- Determining approved assemblies
- Installation requirements based on:
  - Manufacturer’s requirement
  - Local code
  - Location
Standards & Specifications (cont.)

Sources for Standards for the Approval of Assemblies

• USC FCC&HR
• ASSE
• ASTM
• FM
• UL
• Current Plumbing Code
Standards & Specifications (cont.)

Installation Detail Drawings

Clearances for assemblies
• From wall
• To bottom of assembly
• To top of cover
• To connect test kit

Will supports be required?
Will an enclosure be required?
• What type of enclosure?
• Will it require a heat source?
Standards & Specifications (cont.)

Program Policies

What does compliance look like?
How will compliance be monitored?
Who is empowered to enforce?
What are the circumstances that require disconnection of water service?
Standards & Specifications (cont.)

Emergency Response Plan
(Should include)

- Determining source of contamination
- Extent of contamination
- Isolation of contamination
- Disposal of contaminated water
- Emergency water for drinking and bathing
- Contact appropriate personnel
- Anything else required by governing State agency
Construction Plan Review

An Additional Education Opportunity

Ensure Compliance with Program Requirements Prior to Construction

Identify Existing and Potential Cross Connections

- Type of Hazard/Assembly Required
- Location of Assembly
- Size of Assembly
Surveying New/Existing Facilities

Inspections-New Installation or Retrofit
Who is Responsible?
   Municipality/Water System Staff
   Division, Department, Agency or Other
When will the inspection be done?
   Before they get water, C.O.
   During plumbing inspections
   Because of a water quality issue
What kind of inspection will be done?
   Containment, Isolation or Both
Testing & Maintenance

Determine Responsibility for Testing and Repair of Assemblies:

Who will certify those doing the work?
Does your state certify testers?
Will you be administering a tester’s class, or will you use another municipality’s testers?
Who will install/own assemblies?
Who will do initial inspection/test?
Who will make repairs?
Record Keeping

Determine what software you will use to maintain your backflow program data:
- Commercially Available
- In-House written
- Database software, i.e., MS Access
- Contact other municipalities to find out what they are using

Develop a Test and Maintenance Report Form:
- Decide what is your best format
- Maintain an electronic copy for distribution
- Get a copy of the test and maintenance report form from other municipalities to help you create your own
Charlotte Record Keeping
Charlottesville Record Keeping cont.

Address: 200 QUEENS RD

Service Address: 200 QUEENS RD
Service Number: 44589-101
Service Type: IRRIGATION
Device Serial Number: 83194B
Meter Size: 1 INCH
Date of Last Backflow Test: 09/22/2022

Submit Backflow Device Test

Open Backflow Device Test In Survey123 App
Where to get more information

Other Training Sessions
  Local Training Schools, TREEO and USCFCCCHR
  ABPA, AWWA and other Associations

Books, Articles, Online Resources
  ABPA News, Drinking Water & Backflow and other
  Associations, Organizations and Colleges

Consulting Resources
QUESTIONS?
Contact Information

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Thank You!

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