Backflow Prevention
City Code Updates
(Part 12 Cross Connection Control)

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Agenda

- Backflow prevention program
- New state regulations
- Proposed City Code changes
- Next steps
Safe Drinking Water

• Safe drinking water supply
  – Clean Water Act, 1972
  – Colorado Drinking Water Regulations, Colorado Department of Public Health and Environment (CDPHE) regulations

• Our customers trust us
What is backflow?

Normal Condition
What is backflow?

Backflow Hazards
Sources of Hazards

- Auto repair shop
- Auxiliary water source
- Blood banks
- Boilers
- Car wash
- Chemical processes
- Dental facility
- Display fountain
- Dry cleaning/laundries
- Fire suppression systems
- Greenhouse
- Hair salons
- Hospitals
- Industrial
- Irrigation
- Laboratories
- Livestock facility
- Manufacturing facility
- Medical facility and clinics
- Mortuaries
- Pet store
- Pool
- Restaurants
- Veterinary
Backflow Protection Methods

- Air Gap Separation
Backflow Protection Methods

- Double Check Valve Assembly (DC)
Backflow Protection Methods

- Reduced Pressure Principle Assembly (RP)
Existing Backflow Prevention Program

- New commercial customers since 2001
  - 4,600 existing commercial customers
  - 8,300 assemblies
- Responsibility and cost = customer
- Assemblies must be tested annually
- Utilities tracks assemblies and testing
- City Code and Standards
New State Regulations

- CDPHE Regulation 11.39 adopted January 1, 2016
- Survey all commercial customer by 2020
  - Total of ~14,600 customers
- 100% testing by 2020
  - 20,000 assemblies
- Annual reporting to CDPHE
- Response to violations
Helping Customers Succeed

Customer

- City Code Standards
- CSFD and PPRBD
- Stakeholder Education
- Variances Extensions
- Postcards
- Letters
- Phone calls
- Site visits
- Hotline
- Email
- Website Newsletter
- YouTube

Electricity | Natural Gas | Water | Wastewater
Proposed City Code Changes

Key Revisions:

12.1.101, 12.4.201, 12.4.1202: Definitions

- Approved Backflow Prevention Assembly
- Approved Backflow Prevention Method
- Backflow
- Backflow Prevention Assembly
- Backflow Prevention Method
- Certified Backflow Prevention Assembly Tester
- Cross Connection
- Degree of Hazard
- Premises
- User
Proposed City Code Changes

Key Revisions:

12.4.1201: Scope and Applicability
- Clarifies that one purpose is to comply with State Regulations
- Confirms that Code takes precedent over Utilities’ Standards

12.4.1203: Unlawful Acts
- Includes an Approved Backflow Prevention Method as an acceptable means to protect against cross connections
Proposed City Code Changes

Key Revisions:

12.4.1204: Plan Approval
– Clarifies when a customer needs to submit design plans and information to Utilities

12.4.1205: Installation
– Removes redundant provision

12.4.1205 (New): Inspection
– Clarifies the extent of Utilities’ liability after inspection
Key Revisions:

12.4.1207 (New): Requirements

- Reflects new requirements for when and where a customer must install a backflow prevention method or assembly
  - New commercial customers
  - Existing commercial customers who are modifying the service line or plumbing which creates a cross connection
  - Existing commercial customers if there is a hazard at their premises
  - Residential customers if a hazard is discovered at their premises
  - Public users (other public water suppliers)
  - CEO may provide exceptions
Key Revisions:

12.4.1209 (New): Testing
- Clarifies testing requirements

12.4.1210 (New): Installation Repair and Testing
- Clarifies that service standards and specifications govern installation, maintenance, repair and replacement
- Provides timeframe for customer compliance before enforcement action is taken
Proposed City Code Changes

Key Revisions:

12.4.1212 (New): Cross Connection Survey
- Clarifies Utilities’ authority to survey customers to identify cross connections

12.4.1213 (New): Enforcement; Remedies
- Removes requirement that a customer receive first Imminent Hazard Order before administrative fines are assessed
Housekeeping Revisions:

12.4.1208 (New): Management Plan
12.4.1211 (New): Recordkeeping
12.4.1213 (New): Enforcement
Next Steps

• Continued outreach to stakeholders
• 2/28: City Council first reading
• 3/14: City Council second reading
• 4/1: City Code changes take effect
Questions