



Randy E. Hayman, Esq., Water Commissioner

MEMORANDUM

To: James Leonard, Records Commissioner

From: Randy E. Hayman, Water Commissioner

Date: June 16, 2022

Subject: Report of the Water Commissioner on the Public Hearing with respect to the Proposed Amendments to the Philadelphia Water Department's Regulations - Chapter 4; 400.2 and 403 and modified amendment to Chapter 4; 400.2 and 400.3

Please find attached for filing my report with respect to a public hearing held on April 11, 2022 regarding the proposed Philadelphia Water Department's regulations – Chapter 4; 400.2 and 403 which were originally filed with your office on January 6, 2022. The Department took public comment at the hearing and reviewed internally before deciding on modifications to the proposed amendments which are detailed in the report.

Also attached here for filing are the modified amendments to the Philadelphia Water Department Regulations – Chapter 4; 400.2 and 403.

In accordance with Section 8-407 of the Philadelphia Home Rule Charter, I am filing this report and these amendments with your Department in order to initiate the public inspection period.

Please also find attached a memorandum from the Law Department approving the report and modified amendments.

Thank you for your assistance in this matter.

A handwritten signature in blue ink, appearing to read "Randy E. Hayman", written in a cursive style.

Randy E. Hayman, Water Commissioner

Attachment



City of Philadelphia

LAW DEPARTMENT
Water Division
1101 Market Street
5th Floor
Philadelphia, PA 19107

MEMORANDUM

TO: Randy E. Hayman, Commissioner
Philadelphia Water Department

FROM: Kevin Birriel, Deputy City Solicitor
Water Division

DATE: June 16, 2022

SUBJECT: Report of the Water Commissioner on the Public Hearing with respect to the Proposed Amendments to the Water Department's Regulations – Chapter 4; 400.2 and 403 and modified amendments to Chapter 4; 400.2 and 403.

I have reviewed the attached report dated June 16, 2022, on the public hearing held on April 11, 2022 with respect to the proposed regulation amendments referenced above. I find the report to be legal and in proper form.

Further I have reviewed the attached Modified Amendments to Chapter 4, Section 400.2 and 403, of the Philadelphia Water Department Regulations and find the regulations to be legal and in proper form.

In accordance with Section 8-407(c) of The Philadelphia Home Rule Charter, you may forward these regulation to the Department of Records where they will be made available for public inspection.

A handwritten signature in black ink, appearing to read 'Kevin Birriel', written over a horizontal line.

Kevin Birriel
Deputy City Solicitor

REPORT OF THE WATER COMMISSIONER
ON THE PUBLIC HEARING WITH RESPECT TO
PROPOSED AMENDMENTS TO CHAPTER 4 OF THE WATER DEPARTMENT
REGULATIONS – CHAPTER 4: 400.2 AND 400.3

June 16, 2022

On January 6, 2022, the Water Department (“Department”) filed with the Department of Records, pursuant to Section 8-407(a) of the Philadelphia Home Rule Charter, proposed amendments to Chapter 4 of the Department’s regulations regarding ferrule connection pipes and backflow protection.

Public notice of the filing of the proposed Regulations was published on January 6, 2022 and requests for a public hearing were made by local unions. A virtual public hearing was scheduled and held on Monday, April 11, 2022, at 10:00 a.m. via Zoom. Walt Krzyanowski of Plumbers Union Local 690; Don Sweeten and Wayne Miller of Sprinkler Fitters Union Local 692; Michael McGaw of the Pennsylvania Association of Plumbing, Heating and Cooling Contractors; Jim Dougherty of Mechanical & Service Contractors Association of Eastern Pennsylvania; Mary Collins of the Building Industry Association (BIA) of Philadelphia; Michael Ingram of the Masters Plumbers Association of Philadelphia; and Terrance Gullette of Just Plumbing & Heating spoke at the hearing. Written comments were not provided.

Through this Commissioner’s Report (Report), amendments to Section 400.2 (Ferrule Connection Pipe) are adopted with modifications based on further consideration of the oral comments. Amendments to 403.0 (Backflow Protection) of the regulations are adopted, with modifications to Section 403.1 and 403.2. Section 403.0 (Backflow Protection) has been reorganized for clarity. Section 403.2 (Backflow Protection Assembly Requirements) has been re-numbered to 403.1 and the former 403.1 (Backflow Protection Technician Requirements) has been re-numbered to 403.2.

This Report will be filed with the Department of Records. The regulations as revised by the Report are attached as Exhibit A and shall become effective 10 days after filing of this Report with the Records Department. A version showing all changes made to the current regulations by the amendments as modified by this Report is attached as Exhibit B. A summary of the testimony and the Commissioner’s response are provided below.

The testifying witnesses at the public hearing support amending sections 403.1 (Backflow Protection Technician Requirements) and 403.2 (Backflow Protection Assembly Requirements). BIA supports the proposed amendments in its entirety and stated, “BIA reviewed these changes with our members and found them to be a clarification of existing practices, and we did not have any objection to them.” With regards to section 400.2 the plumber’s union, sprinkler’s union, plumbing contractors, sprinkler company and mechanical and service contractors believe that the 13D system should be installed by or under the direction of a master plumber only and the 13R system should be installed by only a licensed fire suppression contractor. Those witnesses believe that because the 13D system is a dual system primarily used for domestic water to feed domestic needs of the property it falls within the purview of the plumber. Similarly, the witnesses believe

that the 13R system should be installed by a licensed fire contractor due to the specific training the fire contractors receive.

The Department appreciates the feedback and comments provided by all the interested parties. After the hearing, further review and consultation with the Department's internal experts, the Commissioner has decided that it is in the best interest of the City and the City's residents that either a master plumber or a registered fire suppression contractor may install the 13 and 13R systems, and the Department has removed the 13D system from the exception allowing fire suppression contractors to install. With regards to section 403.2 (Backflow Protection Technician Requirements) and to maintain consistency with the requirements of the Department of Licenses and Inspection, Department regulations will now include a fourth requirement for the fire suppression worker to have a license from the Department of Licenses and Inspection.



Randy E. Hayman
Water Commissioner

EXHIBIT A

CHAPTER 4 WATER

* * *

400.2 Ferrule Connection Pipe

Except as otherwise provided in this Section, Ferrule Type Connection Pipe (2 inches and smaller) from the ferrule to the curb-stop shall be installed, repaired or replaced by or under the direction of a licensed master plumber and shall:

(a) be copper tubing, ASTM Spec. B-88, type K in soft temper with approved red brass fittings; or

(b) be polyethylene service pipe, ASTM D 3350, as required, Water Department Standard Spec. W-21:

(1) When the minimum distance from the curb-stop to the building line is eight (8) feet six (6) inches; or

(2) When the Department of Licenses and Inspections permits the use of polyethylene distributing pipe from the curb-stop to the building line;

(c) be at least five (5) feet in length with block supports where required, and include provision for expansion in accordance with Department standards; and

(d) include a Department approved curb-stop and box located:

(1) Eighteen (18) inches behind the face of adjacent curb when the water main is located in the cartway or in the opposite footway; or

(2) As directed by the Water Department when the water main is located in the abutting footway.

Exception: For National Fire Protection Association (NFPA)13 and 13R residential fire suppression systems, ferrule connection pipe may be installed, repaired, or replaced by a registered fire suppression contractor.

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403.0 BACKFLOW PROTECTION

In order to protect the public water supply from potential cross connection and backflow hazards from connection to the City main, including both domestic and fire service connections within a property and connections to City fire hydrants, backflow protection technicians, property owners and water users shall comply with the requirements of Section 403.1 and 403.2 of these regulations.

403.1 Backflow Protection Assembly Requirements

(a) With the exception of single-family residences and multi-family buildings with four (4) units or fewer, the requirements of this regulation shall generally apply to all water-using structures and systems, regardless of their sizes, plumbing types and water usage patterns. Where the Water Department has determined that backflow prevention measures are needed at any specific single-family residence or multi-family building with four (4) units or fewer in order to protect the public water supply, this regulation shall also apply to that building. Backflow prevention measures include but are not limited to the following requirements.

(1) Any domestic and fire protection service line, including each line of a multiple service line, to any property, shall be equipped with an approved backflow prevention device or an approved air-gap separation on each line. Backflow

prevention assemblies or air-gap separations must be installed where designated by the Water Department at the sole expense of the property owner. Backflow prevention assemblies or air-gap separations must be from an approved Water Department list or otherwise approved by the Water Department. Installers must refer to the latest edition of the *Water Department Cross Connection Control Manual*, for installation requirements and listings of approved backflow prevention assemblies. This manual is available upon request from the Water Department or the Department of Licenses and Inspection.

(2) All other connections to the City water main, including standpipes leading to elevated tanks, temporary ferrules and hose connections, shall be equipped with approved backflow prevention assemblies.

(3) All required backflow prevention or air-gap separation assemblies shall be tested at least once every twelve (12) months. Any newly installed backflow prevention or air-gap separation device shall be tested prior to the initiation of service. The property owner shall be responsible for arranging for testing, for all costs of testing and related maintenance. After testing of a backflow prevention assembly, the results must be signed by a person on the respective registry of Backflow Prevention Technicians for Domestic Systems or the registry of Backflow Prevention Technicians for Fire Systems and sent to the Industrial Waste & Backflow Compliance Unit of the Water Department within three (3) days of completion of work.

(4) Property owners shall be responsible for:
(i) maintaining records of such tests and related maintenance for a period of three (3) years; (ii) ensuring that backflow prevention

and air-gap separation assemblies are maintained and kept in operating condition at all times and (iii) arranging for testing of backflow prevention assemblies whenever required by this Section or a failure is suspected.

(5) As a condition of water and sewer service, the Water Department or other City agency may enter and inspect any property connected to the public water supply system at reasonable times to ascertain if there is adequate backflow protection.

(6) The service of water to any premises or at any connection may be shut off by the Water Department if it or another City agency (i) is denied access to the property for inspection pursuant to this Section after reasonable notice or (ii) it determines there is inadequate backflow protection at the service connection and/or any connection to the main, or a failure to maintain the backflow prevention or air-gap separation assemblies.

403.2 Backflow Protection Technician Requirements

(a) The Water Department (Water Department) maintains two registries of the names of persons certified by the Water Department's designate certification organizations and licensed by the Department of Licenses and Inspection to install, test and service backflow prevention or air-gap separation assemblies. One registry lists the names of backflow prevention technicians for domestic service connections (Backflow Prevention Technicians for Domestic Systems), and the other registry lists backflow prevention technicians for fire service connections

(Backflow Prevention Technicians for Fire System).

(b) The minimum requirements for a technician to be placed on the registry of Backflow Prevention Technicians for Domestic Systems are as follows:

(1) A license as a Registered Master Plumber issued by the Department of Licenses and Inspection;

(2) Successful completion of a four (4) day training by the New England Water Works Association or the American Society of Sanitary Engineering. Testing is part of this training; and

(3) Submission of the Certified Backflow Assembly Technician Registration Form (CR100) to the Industrial Waste and Backflow Compliance Unit of the Water Department.

(c) The minimum requirements for a technician to be placed on the registry of Backflow Prevention Technicians for Fire Systems are as follows:

(1) A license as a Fire Suppression Systems Contractor issued by the Department of Licenses and Inspection;

(2) Successful completion of a four (4) day training by the New England Water Works Association or the American Society of Sanitary Engineering. Testing is part of this training; and

(3) Submission of the Certified Backflow Assembly Technician Registration Form (CR100) to the Industrial Waste and Backflow Compliance Unit of the Water Department.

(4) Fire suppression worker should have a license from the Department of Licenses and Inspection.

(d) The Water Department may remove any person from these registries if the person fails to comply with the minimum requirements for placement on the registries.

(e) Only a person on the registry of Backflow Prevention Technicians for Domestic Systems may: (i) sign permit applications for backflow prevention assembly installation on domestic service lines as a certified technician; and (ii) sign approvals on PWD backflow prevention assembly test and maintenance records for domestic service and other PWD forms for domestic service as a certified technician.

(f) Only a person on the registry of Backflow Prevention Technicians for Fire Systems may: (i) sign permit applications for backflow prevention assembly installation on fire service connections as a certified technician; and (ii) sign approvals on PWD backflow prevention assembly test and maintenance records for fire service and other PWD forms for fire service as a certified technician.

(g) No person shall engage, or cause or direct any other person to engage, in installation, repair or inspection/testing work on domestic service connection backflow prevention assemblies unless such person is on the registry of Backflow Prevention Connection for Domestic Systems, or is licensed as a Registered Master Plumber or journeyman plumber or registered as an apprentice plumber pursuant to Section 9-1003 of the Philadelphia Code and performs such work under the supervision of a person on the registry of Backflow Prevention Technicians for Domestic Systems.

(h) No person shall engage, or cause or direct any other person to engage, in installation, repair or inspection/testing work on fire suppression system backflow prevention assemblies unless such person is on the registry of Backflow Prevention Technicians for Fire Systems, or has an apprentice permit from the Department of License and Inspection pursuant to Section 9-2505 of the Philadelphia Code and performs such work under the supervision of a person on the registry of Backflow Prevention Technician for Fire Systems.

(i) Backflow prevention technicians are subject to all requirements of the Philadelphia City Code and regulations of the Water Department and the Department of Licenses and Inspection.

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EXHIBIT B

**CHAPTER 4
WATER**

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400.2 Ferrule Connection Pipe

Except as otherwise provided in this Section, Ferrule Type Connection Pipe (2 inches and smaller) from the ferrule to the curb-stop shall be installed, repaired or replaced by or under the direction of a licensed master plumber and shall:

(a) be copper tubing, ASTM Spec. B-88, type K in soft temper with approved red brass fittings; or

(b) be polyethylene service pipe, ASTM D 3350, as required, Water Department Standard Spec. W-21:

(1) When the minimum distance from the curb-stop to the building line is eight (8) feet six (6) inches; or

(2) When the Department of Licenses and Inspections permits the use of polyethylene distributing pipe from the curb-stop to the building line;

(c) be at least five (5) feet in length with block supports where required, and include provision for expansion in accordance with Department standards; and

(d) include a Department approved curb-stop and box located:

(1) Eighteen (18) inches behind the face of adjacent curb when the water main is located in the cartway or in the opposite footway; or

(2) As directed by the Water Department when the water main is located in the abutting footway.

Exception: For National Fire Protection Association (NFPA) 13D and 13R residential fire suppression systems, ferrule connection pipe may be installed, repaired, or replaced by a registered fire suppression contractor.

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403.0 BACKFLOW PROTECTION

In order to protect the public water supply from potential cross connection and backflow hazards, ~~any~~ from connection to the City main, including both domestic and fire service connections within a property and connections to City fire hydrants, ~~shall be provided with adequate backflow protection by the property owner or the water user~~ backflow protection technicians, property owners and water users shall comply with the requirements of Section 403.1 and 403.2 of these regulations.

403.1 Backflow Protection Assembly Requirements

(a) With the exception of single-family residences and multi-family buildings with four (4) units or fewer, the requirements of this ~~R~~ regulation shall generally apply to all water-using structures and systems, regardless of their sizes, plumbing types and water usage patterns. Where the Water Department has determined that backflow prevention measures are needed at any specific single-family residence or multi-family building with four (4) units or fewer in order to protect the public water supply, this ~~R~~ regulation shall also apply to that building. Backflow prevention measures include but are not limited to the following requirements.

(1) Any domestic and fire protection service line, including each line of a multiple service line, to any property, shall be equipped with an approved backflow

prevention device or an approved air-gap separation on each line. Backflow prevention ~~devices~~assemblies or air-gap separations must be installed where designated by the Water Department at the sole expense of the property owner. Backflow prevention ~~devices~~assemblies or air-gap separations must be from an approved Water Department list or otherwise approved by the Water Department. Installers must refer to the latest edition of the *Water Department Cross Connection Control Manual*, for installation requirements and listings of approved backflow prevention ~~devices~~assemblies. This manual is available upon request from the Water Department and or the Department of Licenses and Inspection.

(2) All other connections to the City water main, including standpipes leading to elevated tanks, temporary ferrules and hose connections, shall be equipped with approved backflow prevention ~~devices~~assemblies.

~~(3) Only persons certified by the City's designated certification organizations shall install, test and service backflow prevention or air gap separation devices. Installers are subject to all requirements of the Philadelphia City Code and regulations of the Department and the Department of Licenses and Inspection.~~

(4) (3) All required backflow prevention or air-gap separation ~~devices~~assemblies shall be tested by ~~certified service persons~~ at least once every twelve (12) months. Any newly installed backflow prevention or air-gap separation device shall be tested prior to the initiation of service. The property owner shall be responsible for arranging for testing, for all costs of testing and related maintenance. After testing of a backflow prevention

assembly, the results must be signed by a person on the respective registry of Backflow Prevention Technicians for Domestic Systems or the registry of Backflow Prevention Technicians for Fire Systems and sent to the Industrial Waste & Backflow Compliance Unit of the Water Department within three (3) days of completion of work. Test results shall be submitted to:

Philadelphia Water Department
Bureau of Laboratory Services
1500 E. Hunting Park Avenue
Philadelphia, PA 19124 4941.

(4) Property owners shall be responsible for: (i) maintaining records of such tests and related maintenance for a period of three (3) years.; (ii) ensuring that Bbackflow prevention and air-gap separation ~~devices~~assemblies shall be are maintained and kept in operating condition at all times. ~~Backflow prevention and air gap separation devices shall be tested whenever failure is suspected.;~~ and (iii) arranging for testing of backflow prevention assemblies whenever required by this Section or a failure is suspected.

(5) As a condition of water and sewer service, the Water Department or other City agency may enter and inspect any property connected to the public water supply system at reasonable times to ascertain if there is adequate backflow protection.

(5)(6) The service of water to any premises or at any connection may be shut off by the Water Department if it or another City agency (i) is denied access to the property for inspection pursuant to this Section after reasonable notice or (ii) it determines there is inadequate backflow protection at the service connection and/or any connection to the main, or a failure to maintain the

backflow prevention or air-gap separation devices assemblies.

403.2 Backflow Protection Technician Requirements

(a) The Water Department (Water Department) maintains two registries of the names of persons certified by the Water Department's designate certification organizations and licensed by the Department of Licenses and Inspection to install, test and service backflow prevention or air-gap separation devices assemblies. One registry lists the names of backflow prevention technicians for domestic service connections (Backflow Prevention Technicians for Domestic Systems), and the other registry lists backflow prevention technicians for fire service connections (Backflow Prevention Technicians for Fire System).

(b) The minimum requirements for a technician to be placed on the registry of Backflow Prevention Technicians for Domestic Systems are as follows:

(1) A license as a Registered Master Plumber issued by the Department of Licenses and Inspection;

(2) Successful completion of a four (4) day training by the New England Water Works Association or the American Society of Sanitary Engineering. Testing is part of this training; and

(3) Submission of the Certified Backflow Assembly Technician Registration Form (CR100) to the Industrial Waste and Backflow Compliance Unit of the Water Department.

(c) The minimum requirements for a technician to be placed on the registry of Backflow Prevention Technicians for Fire Systems are as follows:

(1) A license as a Fire Suppression Systems Contractor issued by the Department of Licenses and Inspection;

(2) Successful completion of a four (4) day training by the New England Water Works Association or the American Society of Sanitary Engineering. Testing is part of this training; and

(3) Submission of the Certified Backflow Assembly Technician Registration Form (CR100) to the Industrial Waste and Backflow Compliance Unit of the Water Department.

(4) Fire suppression worker should have a license from the Department of Licenses and Inspection.

(d) The Water Department may remove any person from these registries if the person fails to comply with the minimum requirements for placement on the registries.

(e) Only a person on the registry of Backflow Prevention Technicians for Domestic Systems may: (i) sign permit applications for backflow prevention assembly installation on domestic service lines as a certified technician; and (ii) sign approvals on PWD backflow prevention assembly test and maintenance records for domestic service and other PWD forms for domestic service as a certified technician.

(f) Only a person on the registry of Backflow Prevention Technicians for Fire Systems may: (i) sign permit applications for backflow prevention assembly

installation on fire service connections as a certified technician; and (ii) sign approvals on PWD backflow prevention assembly test and maintenance records for fire service and other PWD forms for fire service as a certified technician.

(g) No person shall engage, or cause or direct any other person to engage, in installation, repair or inspection/testing work on domestic service connection backflow prevention devices assemblies unless such person is on the registry of Backflow Prevention Connection for Domestic Systems, or is licensed as a Registered Master Plumber or journeyman plumber or registered as an apprentice plumber pursuant to Section 9-1003 of the Philadelphia Code and performs such work under the supervision of a person on the registry of Backflow Prevention Technicians for Domestic Systems.

(h) No person shall engage, or cause or direct any other person to engage, in installation, repair or inspection/testing work on fire suppression system backflow prevention devices assemblies unless such person is on the registry of Backflow Prevention Technicians for Fire Systems, or has an apprentice permit from the Department of License and Inspection pursuant to Section 9-2505 of the Philadelphia Code and performs such work under the supervision of a person on the registry of Backflow Prevention Technician for Fire Systems.

(i) Backflow prevention technicians are subject to all requirements of the Philadelphia City Code and regulations of the Water Department and the Department of Licenses and Inspection.

