
Pennsylvania Public
Utility Commission,
v.
Pennsylvania-American
Water Company

Docket Nos.:
R-2023-3043189
R-2023-3043190

Public Input Hearing

Pages 1550 - 1616

Hearing Room 1
Keystone Building
400 North Street
Harrisburg, PA

February 6, 2024

Commencing at 6:00 p.m.

INDEX TO EXHIBITS

Docket No. R-2023-3043190/R-2023-3043189

Hearing Date: February 6, 2024

<u>NUMBER</u>	<u>FOR IDENTIFICATION</u>	<u>IN EVIDENCE</u>
Asay Exhibit 6	--	1584
Water Bill		
Asay Exhibit 7		
Community System	--	1584

Design Standards



LOUIS MATZEL
231 MANCHESTER DR
BUSHKILL PA 18324-8257

For Service To:
Account Number: 1024-220037541246
Service Address: 231 Manchester Dr
Bushkill, PA 18324-8257

CONSUMER SERVICE PIPE LEAK

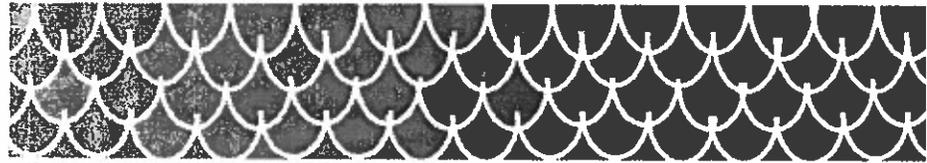
→ While surveying our water system for potential leaks, we detected a leak on your water service pipe. On 12/11/2023 our service representative visited your home and located a leak on your water service pipe. The water service pipe is defined in Pennsylvania American Water's tariff with the PA Public Utility Commission as the portion of the pipe that transmits water from the company-owned water main to the customer's premise and is owned by the customer -- not the water company. In addition, the tariff says the customer is responsible for the installation, repair, replacement and maintenance of all service pipes from the curb valve to the property, including any metered water use that is attributable to a leak in the customer-owned service pipe. IF YOU ARE NOT THE HOMEOWNER, PLEASE GIVE THIS LETTER TO YOUR LANDLORD TO HAVE THE SERVICE PIPE REPAIRED. Water is a valuable resource that should not be wasted. Not only do leaks waste water, but they can also lead to property damage above and below the ground, and they can result in unnecessary high bills.

It is important that you have the leak repaired within 10 days. To conserve water, maintain adequate pressure in the distribution system and avoid the potential of having your water service disconnected, we ask that you have the leak repaired within 10 days of the date of this letter. If repairs are not made, your water service may be discontinued. In the event the leak on your service pipe worsens, or should the condition pose a threat to property and/or public safety, we reserve the right to discontinue water service immediately. Once the service has been terminated, it will not be reinstated until necessary repairs have been completed.

If you have questions or need additional time to schedule the repair or if the repairs have been completed, please contact Pennsylvania American Water at 1-800-565-7292, Monday to Friday, 7:00 a.m. to 7:00 p.m.

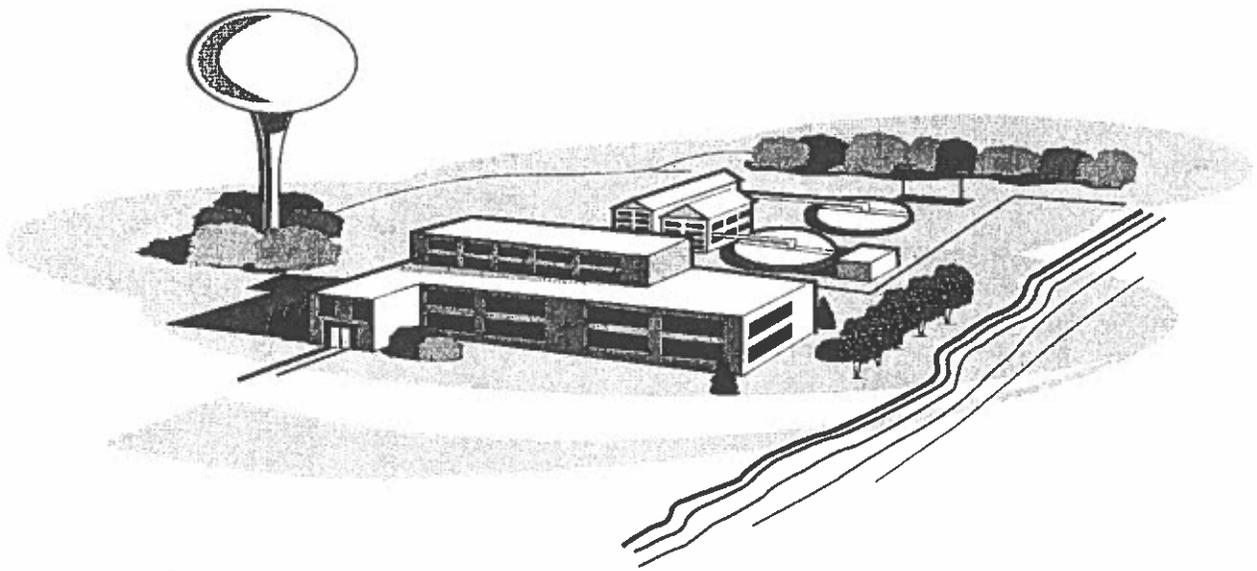
Called 12/18
Notified of Repair Date 12/21
Repair

Water Meter
TURNED OFF - ALLOWED TO LEAK



Public Water Supply Manual

383-2125-108



PART II COMMUNITY SYSTEM DESIGN STANDARDS



COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection

For more information, visit DEP's Web site
at www.depweb.state.pa.us/, Keyword: "Drinking Water."

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Standards and Facility Regulation

DOCUMENT NUMBER: 383-2125-108

TITLE: Public Water Supply Manual - Part II
Community System Design Standards

EFFECTIVE DATE: May 6, 2006

AUTHORITY: Pennsylvania's Safe Drinking Water Act (35 P.S. §721.1 *et seq.*) and regulations at Title 25 Pa. Code Chapter 109

POLICY: Department of Environmental Protection (DEP) staff will follow the guidance and procedures presented in this document to direct and support implementation of permitting activities for community water systems (CWSs) under the Drinking Water Management program.

PURPOSE: The purpose of this document is to establish a rational and reasonable basis for staff decisions which will promote quality, timely and consistent service to the public and regulated community.

APPLICABILITY: This guidance will apply to all CWSs.

DISCLAIMER: The policies and procedures outlined in this guidance are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of DEP to give the rules in these policies that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

PAGE LENGTH: 206 pages

LOCATION: Volume 22, Tab 01

DEFINITIONS: See Title 25 Pa. Code Chapter 109

1. Location

The tank should be located above normal ground surface and be completely housed, or earth-mounded with one end projecting into an operating house to prevent freezing.

2. System Sizing

The capacity of the wells and pumps in a hydropneumatic system should be a least ten times the average daily consumption rate. The gross volume of the hydropneumatic tank, in gallons, should be at least 10 to 15 times the capacity of the largest pump, rated in gpm, unless other measures (e.g., variable speed drives in conjunction with the pump motors) are provided to meet the maximum demand.

Where a hydropneumatic tank is used for chlorine contact, separate inlet and outlet pipes shall be provided. Those pipes shall be separated both horizontally and vertically to the maximum extent possible.

Sufficient storage must be available to provide the required 20-minute disinfectant contact time under maximum flow conditions.

3. Piping

The hydropneumatic tank(s) shall have bypass piping to permit operation of the system while the tank is being repaired or painted.

4. Appurtenances

Each tank shall have an access manhole, a drain and control equipment consisting of a pressure gauge, water sight glass, automatic or manual air blow-off, means for adding air and pressure operated start-stop controls for the pumps. Where practical, the access manhole should be 24 inches in diameter.

D. Distribution System Storage

The applicable design standards of Section VII.A shall be followed for distribution system storage.

1. Pressures

The maximum variation between high and low levels in storage structures providing pressure to a distribution system should not exceed 30 feet. The minimum working pressure in the distribution system shall be 25 psig and a normal working pressure should be approximately 60 psig. When static pressures exceed 120 psig, pressure reducing devices should be provided on mains in the distribution system.

VIII. DISTRIBUTION SYSTEMS

A. Materials

1. Standards, Materials Selection

All materials including pipe, fittings, valves and fire hydrants shall conform to the latest standards issued by AWWA, ANSI/NSF, American Standards Association, ASTM and be acceptable to DEP. All plastic pipe for potable water use also must be approved by NSF and bear the logo "NSF-pw" indicating such approval. DEP may approve materials for which there are no accepted standards provided acceptable supporting information can be provided. Special attention must be given to selecting materials which will protect against both internal and external corrosion and, where appropriate, reduce as much as possible the oxidation potential between dissimilar metals.

2. Permeation by Organic Compounds

Where distribution systems are installed in areas of groundwater contaminated by organic compounds:

- a. Pipe and joint materials which do not allow permeation of the organic compounds shall be used.
- b. Nonpermeable materials shall be used for all portions of the system including pipe, joint materials, hydrant leads and service connections.

3. Used Materials

Only water mains which have been used previously for conveying potable water may be reused provided they meet the above standards and have been restored practically to their original condition.

4. Joints

Packing and jointing materials used in the joints of pipe shall meet the standards of the AWWA. Mechanical joints or slip-on joints with resilient gaskets are preferred. Gaskets containing lead shall not be used. Manufacturer approved transition joints shall be used between dissimilar piping materials.

B. System Design

1. Pressure

All water mains, including those not designed to provide fire protection, shall be sized after a hydraulic analysis based on flow demands and pressure requirements. The pipe system and its appurtenances shall be designed to maintain a minimum pressure of 20 psig at ground level at all points in the distribution system under all

- conditions of flow. The normal working pressure in the distribution system should be approximately 60 psig.

2. Diameter

The minimum size of water main which provides for fire protection and serving fire hydrants shall be 6-inch diameter. Larger sized mains will be required if necessary to allow the withdrawal of the required fire flow while maintaining the minimum residual pressure of 20 psig.

The minimum size of water main in the distribution system where fire protection is not to be provided should be a minimum of 3-inch diameter. Any departure from minimum requirements shall be justified by hydraulic analysis and future water use, and can be considered only in special circumstances.

3. Fire Protection

When fire protection is to be provided, system design should be such that fire flows and facilities are in accordance with the requirements of the State Insurance Services Office.

4. Dead Ends

Dead ends shall be minimized by looping all mains whenever practical. Where dead end lines are necessary in the first stage of construction of a distribution system, the lines shall be provided with the appropriate flushing devices as outlined in Section VIII.B.5.

5. Flushing

Where dead end mains occur, they shall be provided with an approved blow-off or flushing hydrant for flushing purposes. Flushing devices should be sized to provide flows which will give a velocity of at least 2.5 feet per second in the water main being flushed. Fire hydrants may be used for this purpose provided they comply with all of DEP's requirements on fire hydrant installation. No flushing device shall be directly connected to any sewer.

C. Shut-Off Valves

A sufficient number of valves shall be provided on water mains to minimize inconvenience and sanitary hazards will be minimized during repairs. Valves should be located at not more than 500 foot intervals in commercial districts and at not more than one block or 800 foot intervals in other areas of the distribution system.

D. Hydrants

Where freezing temperatures prevail, hydrants of the dry barrel type are preferred. Hydrants of this type should comply with the criteria set forth in AWWA's Standard

Safety and Waterway Management” (available at www.pacode.com) aerial crossings shall be adequately supported and anchored, protected from damage and freezing, and accessible for repair or replacement.

2. Underwater Crossings

Pipelines under stream beds shall be located such that there will be a minimum of 3 feet of cover between the top of the pipe or encasement and the lowest point in the stream bed; provided that, if the pipeline is in rock, it shall have the depth of granular soil plus 6 inches for cover, but never less than 1 foot of total cover. In addition, the following shall apply when crossing water courses which are greater than 15 feet in width:

- a. The pipe shall be of special construction, having flexible restrained or welded watertight joints.
- b. Valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair; the valves shall be easily accessible, and not subject to flooding.
- c. Permanent taps or other provisions to allow insertion of a small meter to determine leakage and for sampling purposes and obtain water for samples shall be made on each side of the valve closest to the supply source.
- d. Pipelines under the stream bed shall be as near to horizontal as possible.

J. Cross-Connections

There shall be no physical connection between the distribution system and any pipes, pumps, hydrants or tanks which are supplied from, or which may be supplied or contaminated from, any source except as approved by DEP. Neither steam condensate nor cooling water from engine jackets or other heat exchange devices shall be returned to the potable water supply. Backflow prevention devices of the type specified in Part V shall be installed where water supply mains are connected to residential, commercial and industrial customers which present a potential contamination hazard to the public water supply system.

K. Water Services and Plumbing

1. Plumbing

Water services and plumbing shall conform to relevant local plumbing codes or to the International Plumbing Code.

2. Booster Pumps

Individual booster pumps shall not be allowed for any individual residential service from the public water supply mains unless adequately protected against

International Code Council

P2903.3 Minimum pressure.

Where the water pressure supplied by the public water main or an individual water supply system is insufficient to provide for the minimum pressures and quantities for the plumbing fixtures in the building, the pressure shall be increased by means of an elevated water tank, a hydro-pneumatic pressure booster system or a water pressure booster pump.

P2903.3.1 Maximum pressure.

The static water pressure shall be not greater than 80 psi (551 kPa). Where the main pressure exceeds 80 psi (551 kPa), an *approved* pressure-reducing valve conforming to ASSE 1003 or CSA B356 **shall be installed** on the domestic water branch main or riser at the connection to the water service pipe.