
THE GENERAL ASSEMBLY OF PENNSYLVANIA

SENATE BILL

No. 597 Session of
2021

INTRODUCED BY STEFANO, MENSCH, SCAVELLO, LAUGHLIN AND COLLETT,
APRIL 21, 2021

REFERRED TO CONSUMER PROTECTION AND PROFESSIONAL LICENSURE,
APRIL 21, 2021

AN ACT

1 Amending Title 27 (Environmental Resources) of the Pennsylvania
2 Consolidated Statutes, in special programs, providing for
3 water quality accountability.

4 The General Assembly of the Commonwealth of Pennsylvania
5 hereby enacts as follows:

6 Section 1. Title 27 of the Pennsylvania Consolidated
7 Statutes is amended by adding a chapter to read:

8 CHAPTER 67

9 WATER QUALITY ACCOUNTABILITY

10 Sec.

11 6701. Scope.

12 6702. Definitions.

13 6703. Asset management plan.

14 6704. Critical valve inspections and testing by water system
15 operator.

16 6705. Meters.

17 6706. Lead service line replacements.

18 6707. Development of cybersecurity system.

1 6708. Annual information to customers.

2 6709. Regulations.

3 6710. Contingency for public funding.

4 6711. Enforcement.

5 § 6701. Scope.

6 This chapter relates to water quality accountability.

7 § 6702. Definitions.

8 The following words and phrases when used in this chapter
9 shall have the meanings given to them in this section unless the
10 context clearly indicates otherwise:

11 "Commission." The Pennsylvania Public Utility Commission.

12 "Community sewerage system." A publicly or privately owned
13 community sewage system that uses a method of sewage collection,
14 conveyance, treatment or disposal other than renovation in a
15 soil absorption area or retention in a retaining tank.

16 "Critical valve." A valve that is identified as critical by
17 a water system operator, including a valve that is:

18 (1) located at a hospital or nursing home;

19 (2) located at an interconnection with a purveyor;

20 (3) a regulator control valve;

21 (4) a system valve that, if nonfunctioning, would cause
22 widespread disruption to a service area; or

23 (5) a valve in a facility, such as a treatment plant,
24 pump station, storage tank or well, that is needed to isolate
25 or operate the facility.

26 "Department." The Department of Environmental Protection of
27 the Commonwealth.

28 "Lead service line." A water service pipe made of lead that
29 connects a water main to a building inlet and a lead "pigtail,"
30 "gooseneck" or other fitting that is connected to the water

1 service pipe.

2 "Public water system." A system for the provision to the
3 public of water for human consumption through pipes or other
4 constructed conveyances, if the system has at least 15 service
5 connections or regularly serves an average of at least 25
6 individuals daily at least 60 days during a calendar year.

7 "Water system operator." Any person or entity that owns or
8 operates a public water system or community sewerage system.

9 § 6703. Asset management plan.

10 (a) Duty to implement.--Beginning no later than 12 months
11 after the effective date of this section, a water system
12 operator shall implement an asset management plan designed to
13 inspect, maintain, repair and renew its water and wastewater
14 infrastructure consistent with standards established by the
15 American Water Works Association and Water Environmental
16 Federation. The asset management plan shall include:

17 (1) A water main renewal program designed to achieve a
18 replacement cycle of no greater than 100 years as
19 determined by a detailed engineering analysis of the asset
20 material of construction, condition and estimated service
21 life remaining of the water mains serving the public water
22 system and the failure or low conveyance capability for fire
23 flow.

24 (2) A wastewater main renewal program designed to
25 achieve a replacement cycle or rehabilitation cycle no
26 greater than 100 years as determined by a detailed
27 engineering analysis of the asset material of construction
28 and condition, including the condition and type of main-to-
29 service connection and estimated service life remaining of
30 the wastewater mains serving the public wastewater system.

1 (3) A water supply and treatment program designed to
2 inspect, maintain, repair, renew and upgrade wells, intakes,
3 pumps and treatment facilities in accordance with all Federal
4 and State regulations, standards established by the American
5 Water Works Association and the Water Environmental
6 Federation and any mitigation plan required under this
7 chapter.

8 (4) A sewer inspection program shall be created in
9 accordance with the NASSCO Pipeline Assessment Certification
10 Program (PACP).

11 (5) An initial schedule for the planned repair and
12 replacement of water and wastewater infrastructure over a
13 specified time period.

14 (6) A general description of the location of the water
15 and wastewater infrastructure, including a map.

16 (7) A reasonable estimate of the quantity of water and
17 wastewater infrastructure to be improved and an estimated
18 timeline in which the assets will be repaired or replaced.

19 (8) Projected annual expenditures to implement the plan
20 and measures taken to ensure that the plan is cost effective.

21 (9) The specific criteria used by the water system
22 operator to identify critical valves and their current
23 condition and a map identifying each one.

24 (b) Annual dedication of money.--Each water system operator
25 shall dedicate money on an annual basis to address and remediate
26 the highest priority projects as determined by its asset
27 management plan.

28 (c) Report to department.--A water system operator shall
29 post on its publicly accessible Internet website and provide an
30 annual report to the commission or department based on the

1 operator's asset management plan prepared under this section.

2 The report shall include:

3 (1) A description that specifies all water and
4 wastewater infrastructure repaired, improved and replaced and
5 the associated costs in the immediately preceding 12-month
6 period according to the asset management plan. The report
7 shall also include a detailed description of inability to
8 execute pipe improvements as planned and how that has or will
9 be addressed so that the plan may be achieved.

10 (2) A detailed description of all water and wastewater
11 infrastructure to be improved in the upcoming 12-month period
12 and the estimated cost of the improvement.

13 (d) Centralized portal to be created.--The department shall
14 create a centralized portal allowing for electronic submittal of
15 the report required under subsection (c). The lack of a
16 centralized portal shall not affect the duty to submit a report
17 under subsection (c).

18 § 6704. Critical valve inspections by water system operator.

19 (a) Duty to inspect and repair or replace critical valves.--
20 A water system operator shall inspect each critical valve in its
21 public water system in accordance with the provisions of
22 subsection (b) in order to determine:

23 (1) accessibility of the valve for operational purposes;
24 and

25 (2) the valve's operating condition.

26 A water system operator shall repair or replace a valve found
27 to be broken or otherwise not operational.

28 (b) Frequency of inspections.--A water system operator shall
29 inspect each critical valve consistent with a plan filed with
30 the commission or the department, no less than every five years.

1 At a minimum, a valve inspection conducted pursuant to this
2 subsection shall include:

3 (1) clearing of the area around the valve to ensure full
4 access to the valve for operating purposes;

5 (2) cleaning out of the valve box;

6 (3) dynamic testing of the valve, by opening and then
7 closing the valve for either of the following number of
8 turns:

9 (i) recommended by the valve manufacturer to
10 constitute a credible test or the number of turns which
11 constitutes 15% of the total number of turns necessary to
12 completely open or completely close the valve; and

13 (ii) complying with any other criteria as may be
14 required by department rules and regulations.

15 (c) Annual fire hydrant inspection.--A water system operator
16 shall annually inspect at least 33% of the fire hydrants in its
17 system in order to determine the hydrant's working condition.
18 The water system operator shall formulate and implement a plan
19 for flushing fire hydrants and at dead ends of water mains in
20 the public water system and as water quality needs dictate. The
21 plan for flushing may be combined with the periodic testing of
22 fire hydrants otherwise required.

23 (d) Recordkeeping and marking of fire hydrants.--

24 (1) A water system operator shall keep a record of all
25 inspections, tests and flushings conducted under this section
26 for a period of at least six years.

27 (2) A water system operator that owns, solely or
28 jointly, a fire hydrant shall mark the hydrant with the
29 initials of its name, abbreviation of its name, corporate
30 symbol or other distinguishing mark or code by which

1 ownership may be readily and definitely ascertained. Each
2 fire hydrant shall be marked with a number or symbol, or
3 both, by which the location of the hydrant may be determined
4 on the water system operator's office records. The markings
5 may be made with paint, brand or with a soft metal plate and
6 shall be of such size and spaced and maintained so as to be
7 easily read.

8 (e) GPS identification.--A water system operator shall
9 identify the geographic location of each valve and fire hydrant
10 in its public water system using a global positioning system
11 based on satellite or other location technology.

12 § 6705. Meters.

13 (a) Allowable error.--No water meter that has an error in
14 registration of more than 2% may be placed in service, nor may a
15 water meter that has an error in registration of more than 4% be
16 allowed to remain in service, when water is passing through the
17 meter at approximately the following rates of flow:

| <u>Meter size (inches)</u> | <u>Gallons per minute</u> |
|----------------------------|---------------------------|
| <u>5/8</u> | <u>6</u> |
| <u>3/4</u> | <u>10</u> |
| <u>1</u> | <u>20</u> |
| <u>1 1/2</u> | <u>30</u> |
| <u>2</u> | <u>50</u> |
| <u>3</u> | <u>90</u> |
| <u>4</u> | <u>180</u> |
| <u>6</u> | <u>300</u> |

27 (b) Prohibition.--

28 (1) No water system operator furnishing metered water
29 service may allow a water meter of one inch or less nor a
30 water meter of more than one inch to remain in service for a

1 period longer than 20 years and eight years, respectively,
2 without testing the meter for accuracy and readjusting the
3 meter if the meter is found to be incorrect beyond the limits
4 established in subsection (a).

5 (2) At a customer's request, the water system operator
6 shall also perform a meter test without charge if a meter has
7 been in service and has not been tested for a period greater
8 than that specified in the following table:

| <u>Inch Meter</u> | <u>Years</u> |
|--------------------|--------------|
| <u>5/8</u> | <u>10</u> |
| <u>3/4</u> | <u>8</u> |
| <u>1</u> | <u>6</u> |
| <u>More than 1</u> | <u>4</u> |

14 (c) Meter test records.--

15 (1) When a water meter is tested, the original test
16 record shall be kept indicating:

17 (i) the information necessary for identifying the
18 meter;

19 (ii) the reason for making the test;

20 (iii) the reading of the meter before being
21 disturbed; and

22 (iv) the accuracy of the meter together with data
23 taken at the time of the test.

24 (2) The record shall be sufficiently complete to permit
25 the convenient checking of the methods employed and the
26 calculations made.

27 (3) A record shall also be kept, preferably numerically
28 arranged, indicating:

29 (i) the date of meter purchase;

30 (ii) the name of the manufacturer;

1 (iii) the meter's size, identification, various
2 places of installation with dates of installation and
3 removal; and

4 (iv) the dates and general results of all tests.

5 (d) Installation and removal of meters.--

6 (1) Within 60 days of installation, a water meter shall
7 be inspected by the water system operator for mechanical
8 condition and suitability of location. In the case of a new
9 meter or a meter reconditioned by a manufacturer, the test
10 results of the manufacturer may be accepted as the
11 installation test if the water system operator has verified
12 the manufacturer's reported test results by testing the
13 greater of 10% or 10 meters of a shipment of meters. In case
14 of emergency, a meter not meeting the requirements of this
15 section may be installed temporarily.

16 (2) (i) A water meter that is removed from service
17 shall be tested within 30 days for accuracy to complete
18 the meter's test history. When a meter is removed from
19 service, it shall be properly sealed to secure registers
20 and measuring devices until it can be properly tested for
21 accuracy.

22 (ii) This paragraph does not apply to a meter
23 permanently removed from service and replaced by a new
24 meter using a remote reading device.

25 § 6706. Lead service line replacements.

26 (a) Duty to submit plan to department.--Within one year of
27 the effective date of this section, a water system operator
28 shall submit to the department a plan to remove and replace all
29 lead service lines, whether customer-owned or water system
30 operator-owned, within or connected to the operator's public

1 water system. The removal and replacement must be completed
2 within 20 years from the effective date of this section.

3 (b) Regulations.--The department shall promulgate
4 regulations establishing the minimum plan requirements under
5 this section.

6 § 6707. Development of cybersecurity system.

7 (a) Regulations.--The department shall promulgate
8 regulations establishing the minimum requirements for a water
9 system operator cybersecurity program.

10 (b) Development of cybersecurity program.--

11 (1) Within 120 days of the publication of the
12 department's final regulations under subsection (a), a water
13 system operator shall develop a cybersecurity program that:

14 (i) is determined by an accredited cyber security
15 professional;

16 (ii) implements organization accountabilities and
17 responsibilities for cyber risk management activities;
18 and

19 (iii) establishes policies, plans, processes and
20 procedures for identifying, reporting and mitigating
21 cyber risk to its public water system.

22 (2) As part of the program, the water system operator
23 shall conduct risk assessments and implement appropriate
24 controls to:

25 (i) mitigate identified risks to the public water
26 system;

27 (ii) maintain situational awareness of cyber threats
28 and vulnerabilities to the public water system; and

29 (iii) create and exercise incident response and
30 recovery plans.

1 (c) Submission of program to department.--A copy of the
2 program developed under this subsection shall be provided to the
3 department in a manner prescribed by the department.

4 § 6708. Annual information to customers.

5 A water system operator shall annually inform the operator's
6 customers of compliance with this chapter.

7 § 6709. Regulations.

8 The department, in consultation with the commission, shall
9 promulgate regulations as necessary to implement this chapter.

10 § 6710. Contingency for public funding.

11 Before a water or wastewater system operator may receive a
12 subsidized loan or other financial assistance from the
13 Commonwealth, the operator shall demonstrate to the department
14 that the operator has developed or is in the process of
15 developing an asset management program and cybersecurity plan as
16 required by this chapter.

17 § 6711. Enforcement.

18 After three years of noncompliance with this chapter, a water
19 system operator shall be considered a public utility under 66
20 Pa.C.S. § 102 (relating to definitions).

21 Section 2. This act shall take effect in 60 days.