# BOROUGH OF ROYALTON DAUPHIN COUNTY, PENNSYLVANIA

#### **ORDINANCE NO. 250**

AN ORDINANCE OF THE BOROUGH COUNCIL OF THE BOROUGH OF ROYALTON, DAUPHIN COUNTY, PENNSYLVANIA, AMENDING, MODIFYING AND CHANGING THE CODE OF THE BOROUGH OF ROYALTON, 1982, BY ENACTING AN ORDINANCE PURSUANT TO THE BOROUGH CODE, THE PENNSYLVANIA CODE AND CLEANWATER ACT, TO PREVENT INTRODUCTION OF CONTAMINANTS INTO THE PUBLIC WATER SUPPLY THROUGH SERVICE CONNECTION, CROSSCONNECTIONS OR BACKFLOWS, AND THE ENFORCEMENT OF VIOLATIONS THEREOF.

**BE IT ENACTED AND ORDAINED** by the Borough Council ("Council") of the Borough of Royalton, ("Borough") Dauphin County, Pennsylvania, AND it is hereby enacted and ordained by the same as follows:

## **SECTION I: PURPOSE**

The purpose of this article is as follows:

- **A.** To protect the public water supply from contamination or pollution by isolating, within the property owner's water system, contaminates or pollutants which could backflow through the service connection into the public water system.
- **B.** To promote the elimination or control of existing cross-connections, actual or potential, between public and outside water supplies and non-potable water systems, plumbing fixtures and sources or systems containing process fluids.
- **C.** To provide for the maintenance and continuation of a cross-connection and backflow control program which will prevent the contamination or pollution of the public water supply.

## **SECTION II: APPLICABILITY**

A. This article shall apply to all properties, commercial and residential, that are served public water by the Royalton Borough Authority and Royalton Borough or any other agencies that supply and distribute public water within Royalton Borough. The Royalton Borough Authority and Royalton Borough or any other provider of public water and the property owner, shall have the joint responsibility for the protection of the public water supply from contamination or pollution due to cross-connection or backflow.

- B. If, in the sole judgment of the Royalton Borough Authority and Royalton Borough or other provider of public water, an approved backflow prevention device is required, the supplier of public water shall give written notice to the property owner to install such an approved backflow prevention device at each service connection to the property. The property owner shall immediately install such approved backflow prevention device, or devices at the property owner's sole cost and expense, but in any event, said installation shall be accomplished no later than 90 days from written notice to do so. Failure, refusal or inability on the part of the property owner to install such device, or devices shall constitute a basis for the Royalton Borough Authority and Royalton Borough or other agency providing public water, to discontinue providing water service to the property until such time as the device, or devices have been installed and tested by a certified backflow prevention tester. The property owner shall not be permitted to drill and/or to operate a new or existing well to avoid the installation of the backflow prevention device or devices. Furthermore, the property owner shall not connect to another public or private water supply system to avoid installation and maintenance of a backflow prevention device unless said connection is approved by the Royalton Borough Authority and Royalton Borough or other agency providing public water, in writing.
- C. Compliance with this Ordinance will be effective for Industrial or Commercial Users on January 1, 2022. Compliance with this Ordinance will be effective for Residential Users on January 1, 2025. However, Compliance is required after January 1, 2020, if any User replaces its water meter.
- D. Both Commercial and Residential Users must comply when they or the Borough Authority install new water meters after the effective date of this ordinance.

#### **SECTION 3: WATER SYSTEM**

- **A.** The water system shall be made up of two parties: one, the public water supply, and two, the property owner's water system.
- **B.** The public water supply system shall consist of the source facilities, and the distribution system shall include all those facilities of the public water supply system under the control of the public water supplier, up to the point where the property owner's water system begins, generally at the curb box.
- C. The source shall include all components of the facilities utilized in the production, treatment, storage, and delivery of water to the public distribution system.
- **D.** The property owner's water system shall include all facilities beyond the curb stops which are utilized in conveying water from the public distribution system to points of

use on the property owner's premises. No matter where located, the water meter shall be owned and maintained by the public water supplier.

## **SECTION 4: CROSS-CONNECTION PROHIBITED**

- **A.** No water service connection shall be installed or maintained to any premises where actual or potential cross-connections to the public water supply system or the property owner's water system may exist, unless such cross-connections are abated or controlled to the satisfaction of the Royalton Borough Authority and Royalton Borough or other provider of public water.
- **B.** No connection shall be installed or maintained whereby water from an auxiliary water supply may enter a public or property owner's water system, unless such auxiliary water supply, as well as the method of connection and use of such supply, has been approved, in writing, by the Royalton Borough Authority and Royalton Borough or other agency providing public water.

## **SECTION 5: SURVEYS AND INVESTIGATIONS**

- **A.** The property owner's premises shall be open at all reasonable times to the Royalton Borough Authority and Royalton Borough or other provider of public water, or its authorized representative, for the purposes of surveying for, or investigating, actual or potential cross-connections.
- **B.** Upon request by the Royalton Borough Authority and Royalton Borough or other provider of public water, the property owner shall furnish information on water use practices within the premises.
- C. It shall be the responsibility of the water consumer to conduct periodic surveys of water use practices on the property owner's premises to determine whether there are actual or potential cross-connections to the property owner's water system.

#### **SECTION 6: WHERE PROTECTION IS REQUIRED**

- **A.** An approved backflow prevention device shall be installed prior to the first branch line leading off each service line to the property owner's water system where, in the judgment of the Royalton Borough Authority and Royalton Borough or other provider of public water, an actual or potential hazard to the public water supply system exists.
- **B.** An approved backflow prevention device shall be installed on each service line to a property owner's water system where the following conditions exist:

- (1) Systems having an auxiliary water supply, unless such auxiliary supply is accepted as an additional source by the Royalton Borough Authority and Royalton Borough or other provider of public water and approved by DEP.
- (2) Systems where any substance is handled in such a fashion as to create an actual or potential hazard to the public water supply system. This shall include systems having sources or auxiliary systems, which contain process fluids or waters originating from the public water supply system, which are no longer under the sanitary control of the Royalton Borough Authority and Royalton Borough or other provider of public water.
- (3) Systems having internal cross-connections that are not correctable, or intricate plumbing arrangements which make it impracticable to determine whether or not cross-connections exist.
- (4) Systems where, because of security requirements or restrictions, it is impossible or impractical to make a complete cross-connection survey.
- (5) Systems having a repeated history of cross-connections.
- (6) Others specified by the Royalton Borough Authority and Royalton Borough or other provider of public water.
- C. An approved backflow prevention device shall be installed on each service to a property owner's water system serving, but not necessarily limited to, the following types of facilities unless the Royalton Borough Authority and Royalton Borough or other provider of public water determines that no actual or potential hazards to the public water supply system exist:
  - (1) Hospitals, mortuaries, clinics, nursing homes;
  - (2) Laboratories;
  - (3) Piers, docks, waterfront facilities;
  - (4) Sewage treatment plants, sewage pumping station or storm pumping station;
  - (5) Food or beverage processing plants;
  - (6) Chemical plants;
  - (7) Metal plating industries;
  - (8) Petroleum processing or storage plants;
  - (9) Radioactive material processing plant;

- (10) Car wash or truck wash; or
- (11) Others specified by the water purveyor.

## **SECTION 7: TYPE OF PROTECTION REQUIRED**

The type of protection required under this article shall depend on the degree of hazard which exists, as follows:

- **A.** An approved air gap separation shall be installed where the public water supply system may be contaminated with substances that are dangerous to public health and could cause a severe health hazard, and where such a device would be technically feasible and/or practical.
- **B.** An approved air gap separation or an approved reduced pressure zone device shall be installed where the public water supply system may be contaminated with a substance that could cause a system or health hazard.
- C. An approved air gap separation, an approved reduced pressure zone device, or an approved double-check valve assembly shall be installed where the public water supply system may be polluted with substances that would be objectionable, but not dangerous to health.

## **SECTION 8: BACKFLOW PREVENTION DEVICE**

- **A.** Any backflow prevention device required by this article shall be of a model, or construction approved by the Royalton Borough Authority and Royalton Borough or other provider of public water, and shall comply with the following:
  - (1) Air gap separation to be approved shall be at least twice the diameter of the supply pipe, measured vertically above the top rim of the receiving vessel, but in no case less than one inch.
  - (2) A double-check valve assembly, or a reduced pressure zone device shall be approved by the Royalton Borough Authority and Royalton Borough or other provider of public water, and shall mean a device that has been manufactured in full conformance with standards established by the American Water Works Association (AWWA) entitled "ANSI/AWWA C51 0 Standard for Double-Check Valve Backflow-Prevention Assembly" and "ANSI/AWWA C511 Standard for Reduced-Pressure-Principle Backflow-Prevention Assembly." Said AWWA standards are herein adopted by the public water supplier. Final approval, however, of the reduced pressure zone device and the double-check valve assembly shall be evidenced by a certificate of full approval, issued by an approved testing laboratory, certifying full compliance with the said AWWA standards.

B. Existing backflow prevention devices approved by the Royalton Borough Authority and Royalton Borough or other provider of public water at the time of installation and properly maintained shall, except for inspection and maintenance requirements, be excluded from the requirement of § 7 of this article, provided that the public water supplier is assured that they will satisfactorily protect the public water supply system. Whenever the existing device is moved from the present location, or requires more than minimum maintenance, or when the Royalton Borough Authority and Royalton Borough or other provider of public water finds that the maintenance of the device constitutes a hazard to health, the device shall be replaced by a backflow prevention device meeting the requirements of this article.

## **SECTION 9: INSTALLATION**

- A. Backflow prevention devices required by this article shall be installed at a location, and in a manner, approved by the Royalton Borough Authority and Royalton Borough or other provider of public water. The device(s) shall be installed by a person properly qualified. Installation of the device(s) shall be at the expense of the property owner.
- **B.** Backflow prevention devices installed on the service lien to a property owner's water system shall be located on the property owner's side of the water meter, as close to the meter as is reasonably practical, and prior to any other connection.
- C. Pits or vaults shall be watertight, flood-free, and maintained free from standing water by means of either a sump and pump, or a suitable drain. Such a pump or drain shall not connect to a sanitary sewer, nor permit flooding of the pit or vault by reverse flow from its point of discharge. An access ladder and adequate lighting, natural or artificial, shall be provided to permit maintenance, inspection, and testing of the backflow prevention device.
- D. When installing a backflow preventer device, the property owner and/or installer must comply and be aware of all safety considerations when installations are performed. Major safety considerations are thermal expansion and device discharge damage. Thermal expansion can cause hot-water tanks and other storage vessels to explode when there are no provisions made for thermal expansion. The Royalton Borough Authority and Royalton Borough or other provider of public water strongly recommends the installation of a thermal expansion tank on hot-water heaters to prevent the hot-water heater's relief valve from discharging or, more important, from exploding. Many backflow prevention devices discharge large amounts of water for various reasons. This discharge of water could obviously pose a hazard when the valves are discharging onto or around electrical equipment. Equipment damage or electrocution could occur. The property owner and/or installer must ensure that valve discharge will not cause safety hazards or property damage. Thermal expansion is a concern anytime substances are confined in a closed system and are heated.

## **SECTION 10: INSPECTION AND MAINTENANCE**

- **A.** It shall be the duty of the property owner at any premises on which backflow prevention devices are required by this article to have inspections, tests, and overhaul made in accordance with the following schedule, or more often where inspections indicate a need.
  - (1) Air separation shall be inspected at the time of installation and at least every 12 months thereafter.
  - (2) Double-check valve assemblies shall be inspected and tested for tightness at the time of installation, and at least every 12 months thereafter. These devices be dismantled, inspected internally, cleaned, and repaired whenever needed and at least every 30 months.
  - (3) Reduced pressure zone devices shall be inspected and tested for tightness at the time of installation, and at least every 12 months thereafter. These devices shall be dismantled, inspected internally, cleaned and repaired whenever needed and at least every five years.
  - (4) Pressure vacuum breakers shall be inspected and tested for the capability to prevent backsiphonage at the time of installation, and at least every 12 months thereafter. These devices shall be dismantled, inspected internally, cleaned, and repaired whenever needed and at least every 12 months.
- **B.** Inspections, tests, and overhaul of backflow prevention devices shall be made at the expense of the property owner, and shall be performed by the Royalton Borough Authority and Royalton Borough or other provider of public water, or a person with a valid and current certification to inspect, test, and overhaul backflow prevention devices.
- C. Whenever backflow prevention devices required by this article are found to be defective, they shall be repaired or replaced according to the manufacturer's recommendation at the expense of the property owner within 60 days of notice from the Royalton Borough Authority and Royalton Borough or other provider of public water.
- **D.** The property owner must maintain a complete record of each backflow prevention device from purchase to retirement. This shall include a comprehensive listing that includes a record of all tests, inspections, and repairs. Records of inspections, tests, repairs, and overhaul shall be submitted to the Royalton Borough Authority and Royalton Borough or other provider of public water upon request.
- **E.** Backflow prevention devices shall not be bypassed, made inoperative, removed, or otherwise made ineffective without specific authorization by the Royalton Borough Authority and Royalton Borough or other provider of public water.

#### **SECTION 11: BOOSTER PUMPS**

- **A.** Where a booster pump has been installed on the service line to, or within, any premises, such a pump shall be equipped with a low pressure cutoff device designed to shut off the booster pump when the pressure in the service line on the suction side of the pump drops 10 pounds per square inch gauge, or less for a period of 30 seconds or longer.
- **B.** It shall be the duty of the property owner to maintain the low-pressure cut-off device in proper working order, and to certify to the Royalton Borough Authority and Royalton Borough or other provider of public water, at least once a year that the device is operating properly.

## **SECTION 12: GEOTHERMAL HEATING AND COOLING SYSTEMS**

All geothermal heating and cooling systems must remain physically disconnected (no cross-connections allowed) from public and private water systems.

## **SECTION 13: VIOLATIONS AND PENALTIES**

- A. The Royalton Borough Authority and Royalton Borough or other provider of public water may deny or discontinue, after issuing at least 30 days' written notice, the water service to any premises wherein any backflow prevention device required by this article is not installed, tested, and maintained in a manner acceptable to the Royalton Borough Authority and Royalton Borough or other provider of public water; if it is found that the backflow prevention device has been removed or bypassed; if an unprotected cross-connection exists on the premises; or if a low pressure cutoff device required by this article is not installed and maintained in working order.
- **B.** Water service to such premises shall not be restored until the property owner has corrected or eliminated such conditions or defects in conformance with this article, and to the satisfaction of the Royalton Borough Authority and Royalton Borough or other provider of public water.
- C. Any person who shall violate this article shall be subject to a judgment in the amount not to exceed One-Thousand Dollars (\$1,000.00), which said penalty and/or fine be set by the District Judge. Each day that the order to connect is violated, or that the property owner fails to comply with same, shall constitute a separate and distinct violation.

## **SECTION 14: SEVERABILITY**

If any sentence, clause, phrase or section of this Ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, phrases, sections or parts of this Ordinance. It is hereby declared as the intention of the Board that this Ordinance would have been adopted had such unconditional, illegal or invalid sentence, clause, phrase, section or part thereof not been included therein.

## **SECTION 15: REPEALER**

Any other Ordinance or parts thereof inconsistent with this Ordinance shall be and are hereby expressly repealed.

## **SECTION 15: EFFECTIVE DATE**

This **Ordinance** shall be effective January 1, 2020.

ENACTED AND ORDAINED this 3rd day of Occuper, 2019.

ATTEST:

## BOROUGH OF ROYALTON DAUPHIN COUNTY, PENNSYLVANIA

#### **ORDINANCE NO. 255**

AN ORDINANCE OF THE BOROUGH COUNCIL OF THE BOROUGH OF ROYALTON, DAUPHIN COUNTY, PENNSYLVANIA, AMENDING, MODIFYING AND CHANGING THE CODE OF THE BOROUGH OF ROYALTON, 1982, BY AMENDING ORDINANCE NUMBER 250, KNOWN AS THE BACKFLOW PREVENTION ORDINANCE BY AMENDING SECTION 12: GEOTHERMAL HEATING AND COOLING SYSTEMS.

**BE IT ENACTED AND ORDAINED** by the Borough Council ("Council") of the Borough of Royalton, ("Borough") Dauphin County, Pennsylvania, AND it is hereby enacted and ordained by the same as follows:

## **SECTION I:**

Section 12: Geothermal Heating and Cooling Systems is hereby *deleted* and amended with the following new Section 12: Geothermal Heating and Cooling Systems.

All Geothermal Heating and Cooling Systems must remain physically disconnected (no cross-connections allowed) from public and private water systems. However, if any resident or business entity wishes to install a geothermal heating and cooling system that must be connected to the public water system, that system shall be done in compliance with the International Residential Plumbing Code with Code Enforcement approval.

## **SECTION II: SEVERABILITY**

If any sentence, clause, phrase or section of this Ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, phrases, sections or parts of this Ordinance. It is hereby declared as the intention of the Board that this Ordinance would have been adopted had such unconditional, illegal or invalid sentence, clause, phrase, section or part thereof not been included therein.

## **SECTION III: REPEALER**

Any other Ordinance or parts thereof inconsistent with this Ordinance shall be and are hereby expressly repealed.

## **SECTION IV: EFFECTIVE DATE**

This Ordinance shall be effective June 3, 2020.

## ENACTED AND ORDAINED this \_\_9TH\_\_\_ day of \_\_\_\_\_June\_\_\_\_, 2020.

ATTEST:

Am & Contraction

Jody a. Alynn President

Mayor