

SECTION 8

Backflow/Cross Connection Control Program

8.0 INTRODUCTION

The responsibility for backflow/cross-connection control lies jointly with the public water supply (City of Oxford), the water consumer, and the regulatory agencies (Ohio Environmental Protection Agency (OEPA), Ohio Department of Health, the Butler County Board of Health, and the Ohio Department of Commerce).

The Ohio EPA requires the City of Oxford, under Rule 3745-95 of the Ohio Administrative Code, to implement and conduct an ongoing backflow prevention and cross-connection control program. The City of Oxford is committed to meeting the requirements of the Ohio Environmental Protection Agency, to assuring water quality at the user's tap, and controlling potential hazards to the City's water systems posed by backflow/cross-connection conditions.

Enclosed is the Backflow/Cross-connection Control Ordinance that gives enforcement authorization to the City of Oxford. This ordinance complies with the requirements set forth by the Ohio Environmental Protection Agency for the protection of Oxford's public water supply.

The use of an approved backflow preventer at the water service connection point of entry (POE), does not affect or eliminate the need for individual fixture devices or air gaps as required by the Plumbing Code of the State of Ohio.

Ordinance No. 2373

ORDINANCE PROVIDING AN EFFECTIVE MEANS FOR PROTECTING THE PUBLIC WATER SYSTEM FROM CONTAMINATION DUE TO BACKFLOW OF CONTAMINANTS THROUGH THE WATER SERVICE CONNECTION INTO THE PUBLIC WATER SYSTEM.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF OXFORD, BUTLER COUNTY, STATE OF OHIO THAT:

SECTION 1: Section 6109.13 of the Ohio Revised Code requires protection of the public water system from contamination through any connection whereby water from a private, auxiliary or emergency water system may enter the public water system;

SECTION 2: Section 3745-95 of the Ohio Administrative Code requires protection of the public water system from contamination due to backflow of contaminants through the water service connection;

SECTION 3: The Ohio Environmental Protection Agency requires the maintenance of a continuing program of cross-connection control that will systematically and effectively prevent the contamination of all potable water systems;

SECTION 4: To accomplish these goals, it is necessary to introduce restrictions that go beyond usual plumbing code requirements, and these restrictions will hereinafter be referred to as "The City of Oxford Backflow/Cross-Connection Control Program."

SECTION 5: If, in the judgment of the City of Oxford Service Director or his representative, an approved backflow prevention device is necessary for the safety of the public water system, the Service Director or his representative will give notice to the water consumer to install such an approved device immediately. The water consumer shall, at their own expense, install such an approved device at a location and in a manner approved by the Service Director or his representative and shall have inspections and tests made of such approved devices as required by the Service Director or his representative.

SECTION 6: No person, firm or corporation shall establish or permit to be established or maintain or permit to be maintained any connection whereby a private, auxiliary or emergency water supply other than the regular public water supply of the City of Oxford may enter the supply or distributing system of said municipality, unless such private, auxiliary or emergency water supply and the method of connection and use of such supply shall have been approved by the Service Director or his representative of the City of Oxford and by the Ohio Environmental Protection Agency.

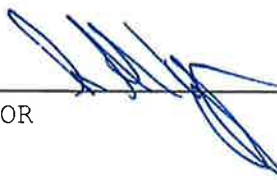
SECTION 7: That it shall be the duty of the Service Director or his representative to cause surveys and investigations to be made of industrial and other properties served by the public water supply where actual or potential hazards to the public water supply may exist. Such surveys and investigations shall be made a matter of public record and shall be repeated as often as the Service Director or his representative shall deem necessary.

SECTION 8: That the City of Oxford's authorized representative shall have the right to enter, at

any reasonable time, any property served by a connection to the public water supply or distribution system of the City of Oxford for the purpose of inspecting the piping system or systems thereof. On demand, the owner, lessees or occupants of any property so served shall furnish to the Service Director or his representative any information that he may request regarding the piping system or systems or water use on such property. The refusal of such information, when demanded, shall, within the discretion of the Service Director or his representative, be deemed evidence of the presence of improper connections as provided in this ordinance.

SECTION 9: That the Service Director or his representative of the City of Oxford is hereby authorized and directed to discontinue, after reasonable notice to the occupant thereof, the water service to any property wherein any connection in violation of the provisions of this ordinance is known to exist, and to take such other precautionary measures as he may deem necessary to eliminate any danger of contamination of the public water supply distribution mains. Water service to such property shall not be restored until such conditions shall have been eliminated or corrected in compliance with the provisions of this ordinance.

SECTION 10: This ordinance shall take effect at the earliest date allowed by law.


MAYOR

ADOPTED: November 15, 1994 ATTEST:


CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: Alan Kyger

Prepared by Law (Staff)

8.1 DEFINITIONS

The following definitions shall apply in the interpretation and enforcement of these rules and regulations as used in Section 3745-95-01 of the Ohio Administrative Code and by authorized representatives of the City of Oxford:

- A. "Air gap separation" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the flood level rim of the receptacle.
- B. "Approved" means that a backflow prevention assembly, device or method has been accepted by the supplier of water and the Director as suitable for the proposed use.
- C. "Auxiliary water system" means any water system on or available to the premises other than the public water system. These auxiliary water systems shall include used water or water from a source other than the public water system, such as wells, cisterns or open reservoirs that are equipped with pumps or other prime movers, including gravity.
- D. "Backflow" means the flow of water or other liquids, mixtures or substances into the distributing pipes of a potable water supply from any source other than the intended source of the potable water supply.
- E. "Backflow preventer" means any assembly, device, method or type of construction intended to prevent backflow into a potable water system. This definition applies wherever "backflow prevention device" is used in this chapter.
- F. "Booster pump" means any device which is intended to increase the in-line water pressure.
- G. "Certified Technician" means an individual, licensed by the State of Ohio, to conduct backflow testing.
- H. "City of Oxford" means the person acting on behalf of the City of Oxford in accordance with the City of Oxford Charter, Ohio Administrative Code and the Ohio Revised Code.
- I. "Consumer" means the owner or person in control of any premises supplied by or in any manner connected to a public water system.
- J. "Consumer's water system" means any water system, located on the consumer's premises, supplied by or in any manner connected to a public water system. A household plumbing system is considered to be a consumer's water system.
- K. "Contamination" means an impairment of the quality of the water by sewage, process fluid or waste to a degree which could create an actual hazard to public health through poisoning or through spread of disease by exposure.
- L. "Containment principle backflow preventer" is a backflow preventer, installed in a consumer's water system that is intended to contain the water within the premises in order to prevent any polluted or contaminated water from backflowing into the public water system. Typically, the containment principle backflow preventer is placed at the service connection unless placement is otherwise specified by rule herein.

- M. "Cross-connection" means any arrangement whereby backflow can occur.
- N. "Degree of hazard" is a term derived from an evaluation of the potential risk to health and welfare.
- O. "Director" means the Director of environmental protection or the Director's duly authorized representative.
- P. "Double check valve assembly" means an assembly composed of two single, independently acting, check valves, including tightly closing shutoff valves located at each end of the assembly and suitable connections for testing the water-tightness of each check valve.
- Q. "Double check-detector check valve assembly" means a specially designed assembly composed of a line-size approved double check valve assembly with a specific bypass water meter and a meter-sized approved double check valve assembly. The meter shall register accurately or only very low rates of flow and shall show a registration for all rates of flow.
- R. "Health hazard" means any condition, device, or practice in a water system or its operation that creates, or may create, a danger to the health of users.
- S. "Human consumption" means the ingestion or absorption of water or water vapor as the result of drinking, cooking, dishwashing, hand washing, bathing, showering, or oral hygiene.
- T. "Interchangeable connection" means an arrangement or device that will allow alternate but not simultaneous use of two sources of water and includes an approved reduced pressure principle backflow prevention assembly or an approved reduced pressure principle-detector assembly on the public water system side of the connection.
- U. "Non-potable water" means water not safe for drinking, personal, or culinary use. (not in OEPA definitions)
- V. "Person" means the state, any political subdivision, public or private corporation, individual, partnership, or other legal entity.
- W. "Point of Entry (POE)" Designates the location where backflow devices(s) are installed on the service line to a consumer's water system. This location, on the consumer's side of the water meter, shall be as close to the meter as reasonably practical and prior to any other connection. This backflow device shall be installed at the location and in a manner approved by the City of Oxford. The rules and regulations governing backflow prevention and cross-connection control in Ohio are the Ohio Revised Code, the Ohio Administrative Code and the Ohio Building Code. (Not in OEPA doc)
- X. "Pollutional hazard" means a condition through which an aesthetically objectionable or degrading material, which is not dangerous to the public water system or health of users, may enter the public water system or portion of a consumer's water system.
- Y. "Potable water" means water intended for human consumption.
- Z. "Premises" means any building, structure, dwelling or area containing plumbing or piping supplied from a public water system.

- AA. "Pressure vacuum breaker" means an assembly composed of an independently acting spring loaded check valve located downstream of an independently acting spring loaded air inlet valve including, tightly closing shutoff valves located at each end of the assembly and suitable connections for testing the integrity of the air inlet and check valves.
- BB. "Process fluids" means any fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a pollutional, system, health, or severe health hazard if introduced into the public water system or portion of a consumer's water system. This includes, but is not limited to:
- a. polluted or contaminated waters;
 - b. process waters;
 - c. used waters originating from the public water system which may have deteriorated in sanitary quality;
 - d. cooling waters;
 - e. contaminated natural waters taken from wells, lakes, streams, or irrigation systems;
 - f. chemicals in solution or suspension;
 - g. oils, gases, acids, alkalis, and other liquid and gaseous fluids used in industrial or other processes, or for fire fighting purposes.
- CC. "Public water system" Or "PWS" means a system which provides water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least sixty days out of the year. Such term includes any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, any collection of pretreatment storage facilities not under such control which are used primarily in connection with such system, and any water supply system serving an agriculture labor camp, as defined in section 3733.41 of the Revised Code. Such term does not include any "special irrigation district," as defined in 40 CFR 141.2. A public water system is either a "community water system" or a "noncommunity water system." An existing public water system is prohibited from splitting the distribution system or adding additional sources to avoid regulation by Chapter 6109 of the Revised Code.
- DD. "Reduced pressure principle backflow prevention assembly" (RPZ) means a ~~device~~ an assembly containing a minimum of two independently acting check valves together with an automatically operated pressure differential relief valve located between the two check valves. During normal flow and at the cessation of normal flow, the pressure between these two checks shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the check valves at less than the supply pressure. The unit must include tightly closing shutoff valves located at each end of the assembly, and each assembly shall be fitted with properly located test cocks.
- EE. "Reduced pressure principle-detector assembly" (RPZ) means a specially designed assembly composed of a line-size approved reduced pressure principle backflow prevention assembly with a specific bypass water meter and a meter sized approved reduced pressure principle backflow prevention assembly. The meter shall register accurately for only very low rates of flow and shall show a registration for all rates of flows.
- FF. "Service connection" means the terminal end of a service line from the public water

system. If a meter is installed at the end of the service, then the service connection means the downstream end of the meter.

- GG. "Severe health hazard" means a health hazard to users that could reasonably be expected to result in significant morbidity or death.
- HH. "Supplier of water" means the owner or operator of a public water system.
- II. "System hazard" means a condition posing an actual or potential threat of damage to the physical properties of the public water system or a consumer's potable water system.
- JJ. "Used water" means any water supplied by a supplier of water from a public water system to a consumer's water system after it has passed through the service connection and is no longer under the control of the supplier.
- KK. "Water system" means a system for the provision of piped water or process fluids, and includes any collection, treatment, storage or distribution facilities used primarily in connection with such system.
- LL. "Weep holes" means a series of small diameter holes located in the wall of the supply pipe for a yard hydrant that allow for drainage of accumulated water from the delivery piping. These holes are usually part of a plunger and valve system that seals off the holes during water usage and opens the holes during shutdown. These openings are located below ground level and below the frost line in areas where the threat of freezing exists.
- MM. "Yard hydrant" means a device that is located outside of a building, equipped with a valved mechanism that controls the delivery of potable water, and is not designed to supply a fire department pumper.

8.2 OVERVIEW

The City of Oxford Backflow/Cross-Connection Control Program is designed to protect the public water supply from the hazards of pollution and contamination caused by unauthorized cross-connections and resultant backflow of pollutants and contaminants.

The City of Oxford's program is implemented in two phases of equal standing: new water services and existing services.

8.2.1 New Services

All new commercial sites requiring City water shall have an appropriate backflow prevention device installed prior to water service being activated. The type of backflow device required in each application is decided by the City of Oxford. The program began with an investigation of new service applications. A request for water service requires that a review of proposed water uses be made. The program, while recognizing the need for individual fixture protection, requires that an approved backflow preventer be installed on the service line immediately downstream from the meter. The program protects City water customers from possible backflow/cross-connection contaminants from an adjacent service, but not from their own. The plumbing code, which provides individual fixture protection, functions to complement the requirements of the Oxford Water System.

When ordered by the City of Oxford, the owner or his agent is required to install an approved backflow preventer. The type of backflow preventer required is based on the degree of hazard presented to the public water supply.

A potential threat to the water system that can impair the quality of the water, thereby creating a pollution hazard if allowed to backflow into the supply, can effectively be eliminated with the installation of a double check backflow preventer, a device which consists of two independently acting check valves. A reduced-pressure principle backflow preventer is required when a substance, backflowing into the public water supply, would create the danger of a health hazard. The preventer has the ability to discharge the water to the atmosphere if backflow occurs and the check valves fail to hold.

For new services, determination of the degree of hazard is based on an evaluation of the site and proposed use of the water supply. An RPZ (ASSE 1013) is required on all potable water systems as determined by the City. A Double Check Assembly (ASSE 1015) and/or a Double Check Detector Check (ASSE 1048) is required on all fire suppression systems as determined by the City. If the degree of hazard is in question, the City of Oxford shall have the final authority.

8.2.2 Existing Services

Requirements for cross-connection control are retroactive and thus pertain to those facilities that have existing water service. A City of Oxford computerized listing of customer water meters by street location for commercial establishments will be used to determine compliance sites.

An introductory letter (exhibit 1) is presented to the person in charge at each location detailing the purpose of the survey. A field survey (exhibit 2) is then conducted at each commercial site. The Authorized Representative then inspects the site water meter, documenting size, serial number, and overall condition. If a backflow preventer already existed at the site, its type, size, model number, make and serial number is noted. Any modifications to the device are also noted. The entire site is then investigated for the existence of cross connections. Any hazardous materials observed are noted. Before leaving the site, as necessary, the Authorized Representative evaluates the entire site for backflow risk and also makes a field recommendation as to the type of backflow preventer needed to protect the City water supply from backflow risk observed.

The City of Oxford will review the data collected through the survey and make a final determination as to the required backflow protection.

Notice letters (exhibit 3b) and instructions, (exhibit 3a) explaining procedures for re-certification testing and overhaul, are then mailed to the owner/agent regarding the requirement of backflow protection and directing to comply by obtaining a permit (exhibit 4) and having a backflow preventer installed within thirty (30) days or as designated by the City of Oxford. After the backflow preventer has been installed, the installing plumber or technician who has Ohio backflow certification, forwards to the City of Oxford a certification statement to that effect.

If there is no response by the specified date, a second notice (exhibit 5) is mailed specifying a 15-day deadline for accomplishing the backflow preventer installation.

If there again is no response within the additional time allowed, a final notice will be sent by certified mail (exhibit 6), allowing one final, 10-day period from the date of return receipt of signature, in which the site can come into full compliance with the requirement. This final notice specifies that water service to the location may be terminated at the end of this last period without further notice.

If the site remains in violation at the expiration of this final grace period, the City of Oxford, at its sole discretion, may authorize water service termination to the site.

8.2.3 Testing of Prevention Devices

Once every 12 months, backflow prevention devices are required to have thorough inspections and operational tests to assure the City of the device's continued proper operation.

At the appropriate time the City notifies, by mail, the owner/agent of the site of the requirement to test the backflow preventer (exhibit 7) by a specified date. Notices are generally sent at least one month prior to the specified date for testing. A City permit must be obtained by an approved certified technician for the proper accomplishment of the test. A fee is required for processing required forms.

The certified technician then conducts an on-site test of the backflow preventer within the Ohio EPA testing guidelines (Ohio EPA, Division of PWS, Backflow Prevention and Cross Control 4th Edition 2015). The technician completes the inspection report obtained at the Inspections Department at the Municipal Building, certifies the test and returns the report to the City of Oxford. The device will be rebuilt any time it fails to meet testing criteria. The rebuilt device will be recertified by the certified technician.

Non-compliance by the specified date will result in a second notice (exhibit 8) being mailed allowing an additional 30-day grace period in which to comply.

If there again is no response within the additional time allowed, a final notice (exhibit 9) will be sent by certified mail allowing one final, 10-day period from the date of return receipt signature in which the site can come into full compliance with the requirement. This final notice specifies that water service to the location may be terminated at the end of this last period without further notice.

If the site remains in violation at the expiration of this final grace period, the City of Oxford, at its sole discretion, may authorize water service termination to the site.

8.3 GENERAL POLICY

A. Purpose The purpose of these Rules and Regulations is:

1. To protect the public potable water supply from contamination or pollution by isolating, within the consumer's water system, contaminants or pollutants which could backflow through the service connection into the public potable water system.
2. To promote the elimination or control of existing cross-connections, actual or potential, between the public or consumer's potable water system and non-potable water systems, plumbing fixtures and sources or systems containing process fluids.
3. To provide for the maintenance of a continuing program of cross-connection control which will systematically and effectively prevent the contamination or pollution of the public and consumer's potable water systems.

B. Application These Rules and Regulations shall apply to all premises served by the public potable water system of the City of Oxford, Ohio.

- C. Policy The City of Oxford shall be responsible for the protection of the public potable water system from contamination due to backflow of contaminants through the water service connection. If, in the judgment of the City of Oxford, an approved backflow prevention device is necessary at the water service connections to any consumer's premises for the safety of the water system, the City of Oxford's authorized representative shall give notice to the consumer to install such approved backflow prevention device at each service connection to his premises. The consumer shall immediately install such approved device or devices at his own expense, and failure, refusal or inability on the part of the consumer to install such device or devices immediately shall constitute grounds for discontinuing water service to the premises until such device or devices have been installed.

8.4 WATER SYSTEM

- A. The water system shall be considered to be made up of two parts: the public potable water system and the consumer's water system.
- B. The public potable water system shall consist of the source facilities and the distribution system, and shall include all those facilities of the potable water system under the control of the City of Oxford up to the point where the consumer's water system begins.
- 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 public distribution system shall include the network of conduits used for delivery of water from the source to the consumer's water system.
- E. The consumer's water system shall include those parts of the facilities beyond the service connection which are utilized in conveying water from the public distribution system to points of use.

8.5 CROSS-CONNECTIONS PROHIBITED

- A. No person shall install or maintain a water service connection to any premises where actual or potential cross-connection to a public water system or a consumer's water system may exist unless such actual or potential cross-connections are abated or controlled to the satisfaction of the supplier of water.
- B. No person shall install or maintain a connection between a public water system or consumer's water system and an auxiliary water system unless the auxiliary water system, the method of connection, and the use of such system has been approved by the supplier of water and by the Director as required by section 6109.13 of the Ohio Revised Code.
- C. A public water system shall develop and implement a backflow prevention and cross-connection control program consistent with this chapter.

8.6 SURVEY AND INVESTIGATIONS

- A. The supplier of water shall conduct or cause to be conducted an initial assessment and periodic surveys or investigations of water use practices within a consumer's premises to determine whether there are actual or potential cross-connections to the consumer's water system through which contaminants or pollutants could backflow into the public water

system or determine where in the judgment of the supplier of water, a pollutional system, health or severe health hazard to the public water system exists.

To meet this requirement, the supplier of water shall conduct or cause to be conducted an on-site investigation of all premises at least every five years to identify changes in water use practices at the consumer's property so that new or increased hazards to the water supply are identified and mitigated.

1. In lieu of conducting an onsite investigation of all premises every five years, the supplier of water can document, in writing, an alternate, on-going, methodology to identify changes in water use practices that may represent a new or increased hazard to the public water supply. An on-site investigation is required when a potential new or increase hazard is suspected to confirm the degree or risk and how it will be addressed. Information obtained through a water use survey questionnaire or in coordination with the local building, zone, health, fire protection and other licensing agencies may be used as an indicator of when and on-site investigation should be conducted. Other triggers, such as a request to the supplier of water for a new or additional service line, or an additional or larger meter should warrant an on-site investigation.
 2. In lieu of conducting an on-site investigation of each residential premise, the supplier of water may institute an on-going educational campaign to inform consumers of common backflow hazards created during residential water use, and provide a reporting mechanism for suspected cross-connections. An education campaign may use local media and advertising resources, but must also include information delivered, either electronically or hard copy, to each residential service connection at least annually.
- B. The supplier of water, or the supplier's authorized representative, shall have the right to enter premises served by the public water system at all reasonable times for the purpose of making surveys and investigations of water use practices within the premises.
- C. On request by the supplier of water, or the supplier's authorized representative, the consumer shall furnish the supplier or the supplier's authorized representative, information on water use practices within the consumer's premises.
- D. Paragraph (A) of this rule does not relieve the consumer of the responsibility for conducting, or causing to be conducted, periodic surveys of water use practices on this premises to determine whether there are actual or potential cross-connections in the consumer's water system through which contaminant or pollutants could backflow into a public water system or a potable consumer's water system.

8.7 WHERE PROTECTION IS REQUIRED

- A. An approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises, where in the judgment of the supplier of water or the Director, a pollutional, system, health or severe health hazard to the public water system exists.

- B. An approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises where the following conditions exist:
1. Premises having an auxiliary water system on the premises, unless such auxiliary system is accepted as an additional source by the supplier of water and the source is approved by the Director.
 2. Premises on which any substance is handled in such a fashion as to create an actual or potential hazard to the public potable water system. This shall include premises having sources or systems containing process fluids.
 3. Premises having internal cross-connections that, in the judgment of the supplier of water, are not correctable, or intricate plumbing arrangements which make it impractical to determine whether or not cross-connections exist;
 4. Premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete cross-connection survey;
 5. Premises having a repeated history of cross-connections being established or re-established; or
 6. Others specified by the Director.
- C. The following requirements apply to premises that have an auxiliary water system on the real property that is owned or under control of the consumer and adjacent to the premises.
1. A physical separation shall be maintained between the public water system or a consumer's water system and the auxiliary water system as required by paragraph (B) of rule 3745-95-02 of the Administrative Code; and
 2. An approved backflow prevention device shall be installed on each service connection serving the consumer's water system, unless the supplier of water does all of the following:
 - a. Determines, on a case-by-case basis, that the installation of an approved backflow prevention device on a service connection is not required in consideration of factors including, but not limited to, the past history of cross connections being established or re-established on the premises, the ease or difficulty of connecting the auxiliary water system with the public water system on the premises, the presence or absence of contaminants on the property or other risk factors;
 - b. Requires the consumer to sign an agreement which specifies the penalties, including those set forth in rule 3745-95-08 of the Administrative Code, for creating a connection between the public water system and the auxiliary water system;

- c. Conducts or causes to be conducted an inspection at least every twelve months to certify that no connection or means of connection has been created between the public water system and the auxiliary water system;
 - d. Maintains an inventory of each consumer's premises where an auxiliary water system is on or available to the premises, or on the real property adjacent to the premises; and
 - e. Develops and implements an education program to inform all consumers served by the public water system about the dangers of cross-connections and how to eliminate cross-connections.
- D. An approved backflow prevention device shall be installed on each service line to a consumer's water system serving, but not necessarily limited to, the following types of facilities unless the Director determines that no severe health, health, system or pollutional hazard to the public water system exists:
 - 1. Hospitals, mortuaries, clinics, nursing homes;
 - 2. Laboratories;
 - 3. Piers, docks, waterfront facilities;
 - 4. Wastewater treatment plants, wastewater pumping stations or storm water pumping stations;
 - 5. Food or beverage processing plants;
 - 6. Chemical plants;
 - 7. Metal plating industries;
 - 8. Petroleum processing or storage plants;
 - 9. Radioactive material processing plants or nuclear reactors;
 - 10. Car washes;
 - 11. Others specified by the City of Oxford or the Director.
- E. An approved backflow prevention device shall be installed at any point of connection that is approved in accordance with paragraph (B) of rule 3745-95-02 of the Administrative Code between a public water system or a consumer's water system and an auxiliary water system, unless such auxiliary system is accepted as an additional source by the supplier of water, and the source is approved by the Director.

8.8 TYPE OF PROTECTION REQUIRED

- A. The type of protection required under Section 8.7 (A), (B), (C) of these regulations shall depend on the degree of hazard which exists as follows:
 - 1. An approved air gap separation shall be installed where the public water system may be contaminated with substances that could cause a severe health hazard;
 - 2. An approved air gap separation, an approved reduced pressure principle backflow prevention assembly or an approved reduce pressure detector check assembly shall be installed where the public water system may be contaminated with any substances that could cause a system or a health hazard;

3. An approved air gap separation, an approved reduced pressure principle backflow prevention assembly, an approved reduced pressure principle-detector check assembly, or an approved double check valve assembly shall be installed where the public water system may be contaminated with any substance that could cause a polluttional hazard.
- B. The type of protection required under Section 8.7(E) of these regulations shall be an approved air gap separation or an approved interchangeable connection. A removable spool piece connection is not an acceptable method.
- C. Where an auxiliary water system is used as a secondary source of water for a fire protection system, the provisions of paragraph (B) of this rule for an approved air gap separation or an approved interchangeable connection may be waived by the Director, provided the following conditions exist:
1. At premises where the auxiliary water system may be contaminated with substances that could cause a system, health, or severe health hazard, the public water system or consumer's water system shall be protected against backflow by installation of an approved reduced pressure principle backflow prevention assembly or an approved reduced pressure principle-detector check assembly;
 2. At all other premises, the public water system or a consumer's water system shall be protected against backflow by installation of an approved reduced pressure principle backflow prevention assembly, an approved reduced pressure principle-detector check assembly, an approved double check valve assembly or an approved double check-detector check valve assembly;
 3. The public water system or a consumer's water system shall be the primary source of water for the fire protection system;
 4. The fire protection system shall be normally filled with water from the public water system or a consumer's water system;
 5. The water in the fire protection system shall be used for fire protection only, with no other use of water from the fire protection system downstream from the approved backflow prevention device;
 6. The water in the fire protection system shall contain no additives.
- D. An exception to the requirement in paragraph (A)(2) of this rule may be applied when mitigating the health hazard associated with a water-only, residential-type irrigation system that is not subjected to the backpressure and it not equipped with pumps or other prime movers which can create backpressure to the public or the consumer's water system. In this instance, an approved pressure vacuum breaker can be used to isolate the service line to the irrigation system in lieu of installing a containment assembly at the service connection. The same maintenance and testing requirements as outlined in rule for containment assemblies apply. This exception does not apply if an additive is used within the irrigation system. The supplier of water may determine other hazards exist that warrant additional containment protection at the service connection.

8.9 BACKFLOW PREVENTION DEVICES

- A. Any containment principle backflow prevention device required by rules 3745-95-04 and 3745-95-05 of the Administrative Code shall be of a model or construction approved by the supplier of water, and conform to at least one of the following standards:
1. For air gap separations: the specific edition of the American National Standards Institute (ANSI) and the American Society of Mechanical Engineers (ASME) standard as referenced in rule 4101:3-13-01 of the Administrative Code.
 2. For reduced pressure principle backflow prevention assemblies: the specific edition of the ANSI and the American Water Works Association (AWWA) standard, or the American Society of Sanitary Engineering (ASSE) standard, or the Canadian Standards Association (CSA) standard as referenced in rule 4101:3-13-01 of the Administrative Code; or the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California Specifications of Backflow Assemblies for Reduced Pressure Principle Assemblies – tenth edition (2009);
 3. For double check valve assemblies: the specific edition of the ANSI and the AWWA standard, or the ASSE standard, or the CSA standard as referenced in rule 4101:3-13-01 of the Administrative Code; or the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California Specifications of Backflow Assemblies for Double Check Valve Assemblies-tenth edition (2009);
 4. For reduced pressure principle-detector assemblies: the specific edition of the ANSI and the ASSE standard, or the CSA standard as referenced in rule 4101:3-13-01 of the Administrative Code; or the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California Specifications of Backflow Assemblies Reduced Pressure Principle-Detector Assemblies – tenth edition (2009);
 5. For double check-detector check valve assemblies: the ANSI and the ASSE standard, or the CSA standard as referenced in rule 4101:3-13-01 of the Administrative Code, or the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California Specifications of Backflow Assemblies for Double Check Detector Assemblies – tenth edition (2009);
 6. For pressure vacuum breakers: the ANSI and the ASSE standard, or the CSA standard as referenced in rule 4101:3-13-01 of the Administrative Code.
- B. Any containment principle backflow preventer required by rules 3745-95-04 and 3745-95-05 of the Administrative Code shall be installed at a location and in a manner approved by the supplier of water and shall be installed at the expense of the water consumer. In addition, any backflow prevention device required by paragraphs (B) and (C) of rule 3745-95-05 of the Administrative Code shall be installed at a location and in a manner approved by the Director as required by section 6109.13 of the Revised Code.
- C. It shall be the duty of the water consumer to maintain any containment principle backflow preventer required by rules 3745-95-04 and 3745-95-05 of the Administrative Code in proper working order and in continuous operation.

1. The supplier of water shall retain authority over any containment principle backflow preventer required by rules 3745-95-04 and 3745-95-05 of the Administrative Code.
 2. It shall be the duty of the supplier of water to see that the tests and inspections required under this paragraph are made.
 3. The consumer shall, on any premises on which any containment principle backflow preventer required by rules 3745-95-04 and 3745-95-05 of the Administrative Code are installed, have thorough inspections and operational tests made of the backflow preventers at the time of installation or repair, and as may be reasonably required by the supplier of water or the Director, but in all cases at least once every twelve months. These inspections and tests shall be at the expense of the water consumer and shall be performed by the supplier of water or a person approved by the supplier as qualified to inspect and test backflow preventers.
 4. These devices shall be repaired, overhauled or replaced at the expense of the consumer whenever they are found to be defective.
 5. Records of such inspections, tests, repairs, and overhaul shall be kept by the consumer and made available to the supplier of water.
 6. The supplier of water shall maintain a paper or electronic record of inventory of survey, investigation and containment principle backflow preventer installation report. Records of inspections, tests, repairs and overhauls related to the containment principle backflow preventer required by rules 3745-95-04 and 3745-95-05 of the Administrative Code shall be maintained by the supplier of water for a minimum of five years.
- D. The supplier of water shall inspect or cause to be inspected, all installations where an approved connection exists between an auxiliary water system and the public water system or a consumer's water system at least once every twelve months and shall maintain an inventory of all such installations and inspections records. Such inventories and inspection records shall be made available during sanitary surveys and at other reasonable times. Paper or electronic inspection records shall be maintained by the supplier of water for a minimum of five years.
- E. Containment principle backflow preventers approved by the supplier of water and conforming to prior or subsequent editions of the standards cited in paragraph (A) of this rule, and which are properly maintained in accordance with paragraph (C) of this rule shall be excluded from the requirements of paragraphs (A) and (B) of this rule if the supplier of water and the Director are assured that the backflow preventer will satisfactorily protect the public water system.

[Comment: This rule incorporates the following standard by reference: The manual of cross-connection control, tenth edition, published by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California. At the effective date of this rule, a copy of this document may be obtained from the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, research annex 219, 3716 Hope Street, Los Angeles,

CA 90089-7700, phone: 866-545-6340, world-wide web address: <http://www.usc.edu/dept/fccchr/>. This document is available for review at Ohio EPA, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, OH 43215]

8.10 INSTALLATION

- A. Backflow prevention devices required by these rules and regulations shall be installed at a location and in a manner approved by and at the expense of the water consumer. In addition, any backflow prevention device required by Section 8 (B) and 8 (C) of these regulations shall be installed at a location and in a manner approved by the Director as required by Section 6109.13 of the Ohio Revised Code.
- B. Backflow prevention devices installed on the service line to a consumer's water system shall be located on the consumer's side of the water meter, as close to the meter as reasonably practical, and prior to any other connection.
- C. Pits or vaults shall be of water-tight construction, be so located and constructed as to prevent flooding and shall be maintained free from standing water by means of either a sump pump or a suitable drain. Such sump 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 natural or artificial lighting shall be provided to permit maintenance, inspection and testing of the backflow prevention device.
- D. Reduced pressure principle backflow prevention devices must be installed above ground level or floor level, whichever is higher.

8.11 INSPECTION AND MAINTENANCE

- A. It shall be the duty of the consumer at any premises on which backflow prevention devices required by these regulations are installed to have inspections, tests and overhauls made in accordance with the following schedule, or more often where inspections indicate a need:
 - 1. Air gap separations shall be inspected at the time of installation and at least every twelve months thereafter;
 - 2. Double check valve assemblies shall be inspected and tested for tightness at the time of installation and at least every twelve months thereafter.
 - 3. Reduced pressure principle backflow prevention devices shall be inspected and tested for tightness at the time of installation and at least every twelve months thereafter.
 - 4. Interchangeable connections shall be inspected at the time of installation and at least every twelve months thereafter.
- B. Inspections, tests and overhauls of backflow prevention devices shall be made at the expense of the water consumer and shall be performed by a certified technician.
- C. Whenever backflow prevention devices, required by these regulations, are found to be defective, they shall be repaired, overhauled or replaced at the expense of the consumer

without delay. Documentation of the rebuilding and recertification shall be forwarded to the Service Department, City of Oxford Municipal Building.

- D. The water consumer 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, repairs and overhauls. Records of inspections, tests, repairs and overhauls shall be submitted to the City of Oxford.
- E. Backflow prevention devices shall not be bypassed, made inoperative, removed or otherwise made ineffective without specific authorization by the City of Oxford.

8.12 BOOSTER PUMPS

- A. No person shall install or maintain a water service connection where a booster pump has been installed, unless an approved method is in place and is operational to maintain a minimum suction pressure as prescribed as presented in the following:
 - 1. For booster pumps not intended to be used for fire suppression, no person shall install or maintain a water service connection to any premises where a booster pump has been installed on the service line to or within such premises, unless such booster pump is equipped with a low pressure cut-off designed to shut off the booster pump when the pressure in the service line on the suction side of the pump drops to ten pounds per square inch gauge or less.
 - 2. For booster pumps used for fire suppression, also referred to as fire pumps, installed after August 8, 2008, no person shall install or maintain a water service connection to any premises where a fire pump has been installed on the service line to or within such premises, unless the pump is equipped with one of the following:
 - a. A low suction throttling valve which is a pilot-operated valve installed in the discharge piping that maintains positive pressure in the suction piping, while monitoring pressure in the suction piping through a sensing line. The valve must throttle the discharge of the pump when necessary so that suction pressure will not be reduced below ten pounds per square inch gauge while the pump is operating.
 - b. A variable speed suction limiting control which is a speed control system used to maintain a minimum positive suction pressure at the pump inlet by reducing the pump driver speed while monitoring pressure in the suction piping through a sensing line. It will be set so that the suction pressure will not be reduced below ten pounds per square inch gauge while the pump is operating.
 - 1. For booster pumps used for fire suppression, also referred to as fire pumps, installed prior to August 8, 2008, which are equipped with a low pressure cut-off as defined in paragraph (A)(1) of this rule, are not required to modify the installation solely for the purpose of meeting the new methods accepted after this date, under paragraph (B)(1) of this rule.
- B. It shall be the duty of the water consumer to maintain the low pressure cut-off device, the low suction throttling valve, or the variable speed suction limiting control in proper working order and to certify to the supplier of water, at least once every twelve months that the minimum suction pressure sustaining method is operable and maintained in a continuous operation.

- C. The supplier of water must maintain electronic or paper records of inventory of booster pump installations. Electronic or paper records certifying operation must be retained for a period of five years.
- D. The provision of this rule shall be followed notwithstanding inconsistent provisions in the Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers or "Recommended Standards for Water works" (2012).

[Comment: "Recommended Standards for Water Works" 2012 edition. Copies are available from "Ohio EPA, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, Ohio 43215, (614) 644-2752" or online at <http://10statesstandards.com> or www.epa.ohio.gov/ddagw.]

8.13 VIOLATIONS

- A. The City of Oxford shall deny or discontinue, after reasonable notice to the occupants thereof, the water service to any premises wherein any backflow prevention device required by these regulations is not installed, tested and maintained in a manner acceptable to the City of Oxford, or if it is found that the backflow prevention device has been removed or by-passed, or if any unprotected cross-connection exists on the premises, or if a low pressure cut-off required by these regulations is not installed and maintained in working order or if the City of Oxford or the authorized representative is denied entry to determine compliance with the corresponding rule 3745-95-07 of the Administrative Code.
- B. Water service to such premises shall not be restored until the consumer has corrected or eliminated such conditions or defects in conformance with these regulations and to the satisfaction of the City of Oxford.

8.14 Yard Hydrants

- A. Yard hydrants with weep holes:
 - 1. Yard hydrants with weep holes used for human consumption installed on a public water system are prohibited unless the weep holes are sealed.
 - 2. Yard hydrants with weep holes not used for human consumption installed on a public water system, and those installed on a consumer's water system, shall have an appropriate backflow prevention assembly on the service line to protect the public water system. Yard hydrants with weep holes installed on the public water systems shall be clearly labeled as "non-potable" or "not for human consumption."
- B. Sanitary yard hydrants that do not have weep holes, such as those that meet the requirements of the "American Society of Sanitary Engineers (ASSE) standard 1057 Performance Requirements for Freeze Resistant Yard Hydrants with Backflow Protection" (2001), are not prohibited provided:
 - 1. The device is acceptable to the public water system to which it will be connected.
 - 2. Any other applicable backflow prevention and cross-connection control requirements of this chapter are met.

8.15 EXCLUSIONS

- A. The program and its rules and regulations are designed to protect the City's public potable water system from the hazards of pollution and contamination caused by cross-connections. The remedies specified are solely for the protection of the City system.
- B. The program is designed to protect the City's water system. If there is the risk of a backflow problem within the customer's system it will not be addressed by this program.
- C. The owner/agent is completely responsible for the internal protection of his potable water system for his own use and should take appropriate action.
- D. If a question of degree of hazard exists, the City of Oxford will have the final determination.

8.16 REQUIRED TIME PERIODS FOR INSTALLATION, TESTING AND REBUILDING

- A. Installation After the City of Oxford makes a final determination as to whether a backflow prevention device is required at a service address and decides on the type of device required, a notice letter is immediately sent to the owner/agent of the service address. The owner/agent is notified of the permit requirements and directed to have a backflow preventer installed within thirty (30) days or as designated by the City of Oxford (exhibit 3b). After the preventer has been installed, the installing plumber or technician forwards, to the City of Oxford, a certification statement to that effect. If there is no response within the specified time, a second notice (exhibit 5) is mailed specifying a 15-day deadline.

If there again is no response within this 15-day period, a final notice will be sent, by certified mail (exhibit 6), allowing one final, 10-day period from the date of return receipt signature. This final notice clearly specifies that water service to the location may be terminated at the end of this 10-day period without further notice.

If this site continues in violation at the end of this final, 10-day grace period, the City of Oxford, at his sole discretion, may authorize water service termination to the site without further notice.

- B. Annual Testing Annually, Reduced Pressure Zone, ASSE 1013, and Double Check Valve, ASSE 1015, devices, are required to have thorough inspections and operational tests to assure their continued efficient operation. At the appropriate time the City will notify the owner/agent (exhibit 7) of the requirement to test the backflow preventer by a specified date. Notices are generally sent at least one month prior to the specified date for testing.

The owner/agent contacts a State of Ohio certified technician. The certified tester has 30 days to purchase a permit, conduct an on-site test, and return the test results to the City of Oxford.

Non-compliance by the specified date will result in a second notice (exhibit 8) being mailed, allowing an additional 30-day grace period in which to comply.

If there again is no response within this 30-day period, a final notice (exhibit 9) will be sent certified mail allowing one final 10-day period from the date of the letter. This final notice

clearly specifies that water service to the location may be terminated at the end of this last 10-day period without notice.

If the site continues in violation at the end of this final 10 day grace period, the City of Oxford, at his sole discretion, may authorize service termination to the site without further notice.

- C. Rebuilding Reduced Pressure Zone, ASSE 1013, and Double Check Valve, ASSE 1015, as well as the ASSE 1048, Double Check Detector Check Valve Assembly require rebuilding when a problem surfaces during normal operation or is found during the annual inspection process. All rebuilding must be performed by a State of Ohio certified tester at the expense of the owner/agent. Documentation of the repair and recertification shall be forwarded to the City of Oxford.

8.17 THERMAL EXPANSION

Thermal expansion occurs when water expands due to being heated by a water heater. When a backflow preventer is put on-line, the expanded water is no longer allowed to flow back into the City main to be dissipated. This may result in a pressure build-up on the water heater, causing the relief valve to open and vent water into the atmosphere. Other possible side effects are damage to the center flue of a gas fired water heater from constant internal pressure which could spur a hazardous presence of carbon monoxide gas or even a water heater explosion.

State plumbing codes 4101: 3 Section 60 Safety Devices, of the Ohio Administrative Code Section E or the most current edition, requires that an expansion tank or other device designed for thermal expansion control be installed on the cold water supply to the heater. *This code is to be followed by plumbers in making backflow installations.*

While thermal expansion units are not required by the City of Oxford the property owner must comply with this ordinance and should be aware of the requirements of the Ohio Plumbing Code and the concerns of the City of Oxford.

8.18 PERMIT FEES

In accordance with the City of Oxford Codified Ordinances a permit fee shall be paid for each device installation or re-certification. The fee should be paid at the City of Oxford Inspections Department, 101 East High Street, Oxford, Ohio 45056-1887.

8.19 Exhibits used in the Backflow / Cross Connection Control Program

Exhibit #:

1. Survey Introduction: Owner Agent Letter Given by an Authorized Representative at initiation of field survey.
2. Site Identification: Water Service Survey Used by an Authorized Representative during inspection of site facilities. Includes pertinent data for site identification and evaluation for backflow risk and recommended remedy.
- 3a. Instructions for Backflow Preventer Installation, Recertification Testing and Overhaul Relevant procedures for Owner/Agent/Manager/Plumber.
- 3b. Notice to Install Backflow Preventer (First Notice) Forwarded to Owner/Manager.
4. Backflow Preventer Permit Required for installation, recertification and overhaul.
5. Notice to Install Backflow Preventer (Second Notice) Forwarded to Owner/Manager.
6. Notice to Install Backflow Preventer (Final Notice) Forwarded to Owner/Manager (Certified Mail). Non-compliance may result in termination of water service.
7. Notice to Test Existing Backflow Prevention Device (First Notice) Forwarded to Owner/Manager.
8. Notice to Test Existing Backflow Prevention Device (Second Notice) Forwarded to Owner/Manager.
9. Notice to Test Existing Backflow Prevention Device (Final Notice) Forwarded to Owner/Manager (Certified Mail). Non-compliance may result in termination of water service.

Exhibit 1: Owner/Agent Letter



DATE:

OWNER/MANAGER:

ADDRESS:

SUBJECT: CITY OF OXFORD BACKFLOW/CROSS CONNECTION PREVENTION PROGRAM

Dear City of Oxford Water Customer:

The Ohio Environmental Protection Agency Regulations require the City of Oxford, under Rule 3745-95 of the Ohio Administrative Code, to control potential hazards to the City water system posed by backflow/cross connection conditions.

As part of Oxford's Cross-Connection Control Program, a field survey is being conducted for the purpose of determining potential site contamination of the water supply.

A City of Oxford authorized representative will inspect your water meter and piping systems and, as a result, your location will be evaluated for this contamination hazard and City records will be updated.

Should you have questions regarding this matter please call (513) 524-0203. Thank you for your cooperation.

Sincerely,

«Org Signature »

File

Exhibit 2: Site Identification**BACKFLOW SITE IDENTIFICATION**

City of Oxford, Ohio

Billing Address : _____
 (if different) _____
 Account # : _____
 Building Name : _____
 Type of Business : _____

Site Owner : _____
 Address : _____
 Phone : _____
 Site Manager : _____
 Address : _____
 Phone : _____

Is water use consistent with type of business? YES NO If NO, explain: _____

Is there an auxiliary water supply? YES NO If YES, describe: _____

Is there a lawn sprinkler system? YES NO If YES, Describe: _____

Is there a fire control sprinkler system? YES NO If YES, describe: _____

Check valve type: _____ Make _____ Model _____ Serial # _____

METER:

Size _____
 Make _____
 Serial # _____
 Supply Line Size _____
 Condition _____

BACKFLOW PREVENTER

Is a Backflow device present:
 YES NO (If YES, describe)
 Size _____ Type _____
 Model # _____
 Maker _____ Serial # _____

Has the device been modified?

YES NO
 If YES, describe: _____

RISK ANALYSIS

⇒ Are there connections on supply line before meter? YES NO If YES, Describe: _____

⇒ Any cross connection on premises? YES NO If YES, describe: _____

⇒ Is there weather protection of meter and existing preventer? YES NO Describe condition: _____

⇒ Are there hazardous materials on site? YES NO If YES, describe: _____

⇒ Entire site evaluation for backflow risk: Describe: _____

EVALUATION

Name of Surveyor _____ Date of survey _____

Evaluation:

_____ No backflow devices required
 _____ Air gap required at: _____
 _____ Inch Reduced Pressure Device required at: _____
 _____ Inch Double Check Device required at: _____
 _____ Low Pressure Cut Off Switch required on following pumps: _____

Additional
 Remarks: _____

Exhibit 3a: Instructions for Backflow Preventer Installation

INSTRUCTIONS FOR BACKFLOW PREVENTER INSTALLATION, RECERTIFICATION TESTING, AND OVERHAUL

1. Contact a certified technician of backflow prevention devices.
2. Prior to testing, have the certified technician obtain a permit for each device at the Oxford Municipal Building. A permit fee is required for recertification, testing and overhaul.
3. Have the certified technician install, test or overhaul the approved device as required by notice accompanying these instructions.
4. Return the installation, test or overhaul certification, as applicable to:

City of Oxford
Inspections Department
Backflow/Cross-Connection Control
101 East High Street
Oxford, Ohio 45056-1887

Exhibit 3b: First Notice to Install Backflow Preventer



«LetterSentDate :Month Day, Year:Internal date long»

TEST FORM DUE

NO LATER THAN: «ResponseDueDate :Month Day, Year:Internal date long»

«Mailing_Address »

Dear «Mail_Greeting »,

Our records indicate that one or more backflow prevention assemblies have been installed:

«ServiceAddress ».

Backflow prevention assemblies within the City of Oxford are required to be tested on a regular basis.

In order to comply with the Ordinance 2373 and departmental regulations, the listed backflow prevention assemblies must be tested annually by a certified and licensed tester. Accordingly, you are required to have the listed assemblies tested and a completed inspection report returned to our office within 30 days from the date of this letter.

If you have any questions, feel free to contact the Cross Connection Control Supervisor at the above address or you may phone «Org Phone ».

Sincerely,

«Org Signature »

Exhibit 4: Backflow Preventer Permit

Permit Fee \$ _____

City of Oxford
Backflow Prevention Permit
101 East High Street, Oxford, Ohio 45056
513/524-5205

Permit # _____

Customer Name _____ Telephone # _____

Address _____

weN ↑ dliubeR ↑ tnemecalpeR ↑ tseT launnaA ↑ reteM relknirpS ↑

Note – New and rebuilt devices with test ports require testing by a State of Ohio Certified Technician

Received \$ _____ Date _____ Signature _____

Bottom portions should be filled out by a Certified Technician

BACKFLOW PREVENTER INFORMATION

Size _____ Make _____ Serial # _____

Location of Device _____ Address of Device _____

Date Installed _____

Test Information

*Note: This information needs to be completed and returned to the Utilities Inspector, c/o Inspections Department, city of Oxford at the above address.

1. Reduce Pressure Backflow Preventer (ASSE 1013)
 2. Double Check Valve Assembly (ASSE 1015)
- (Use Check Valve No. 1 and Check Valve No. 2 Tests Only)

DIFFERENTIAL PRESSURE

	Check Valve #1	Check Valve #2	Relief Valve
Test Before Repair	Leaked ↑ Closed Tight ↓	Leaked ↑ Closed Tight ↓	Opened at _____ psi Reduced Pressure
Describe Repair			
Materials Used			
Final Test	Closed Tight ↑	Closed Tight ↑	Opened at _____ psi Reduced Pressure

By _____
Certified Tester Name (Print) Signature Date

Plumbing Company (Print)

Certified Tester Number

White – Original Canary – Customer Pink – Technician Goldenrod - Inspector

Exhibit 5: Second Notice to Install Backflow Preventer



«LetterSentDate :Month Day, Year:Internal date long»

TEST FORM DUE
NO LATER THAN: «ResponseDueDate :Month Day, Year:Internal date long»

«Mailing_Address »

Re: Second Notice New Installation of Backflow Prevention Assembly

Dear «Mail_Greeting »,

We have not as yet received a reply to our above-referenced notification to you. This is our second letter in this regard. Backflow prevention assemblies within the City of Oxford are required to be tested on a regular basis.

Our records indicate that we have not received the test reports on the following backflow prevention assembly:

«ServiceAddress »

In order for backflow prevention assemblies to continue to operate efficiently they must be tested and serviced when required. As well, in order to comply with the enabling legislation the listed backflow prevention assemblies must be tested annually by a certified and licensed tester. Accordingly, you are required to have the listed assemblies tested and a completed inspection report returned to our office.

This letter is to give you notice that the requested tests must be completed and the necessary inspection forms returned to this office within 15 days of the date of this letter or the water service to the subject premises may be discontinued without further notice.

If you have any questions, do feel free to contact the Cross Connection Control Supervisor at the above address or you may phone «Org_Phone ».

Sincerely,

«Org_Signature »

Exhibit 6: Final Notice to Install Backflow Preventer



«LetterSentDate :Month Day, Year:Internal date long»

TEST FORM DUE

NO LATER THAN: «ResponseDueDate :Month Day, Year:Internal date long»

«Mailing_Address »

Re: FINAL NOTICE New Installation of Backflow Prevention Assembly

Dear «Mail_Greeting »,

We have not yet received a reply to our notifications to you. This is our third letter in this regard.

You are hereby notified that in accordance with the enabling legislation and departmental regulations the water supply to your premises located at:

«ServiceAddress »

will be discontinued «[Current Letter]Response Days» days from the date of this letter and it shall remain discontinued until you have complied with the letters of this office.

This action is required by enabling legislation: Ordinance 2373 and departmental regulations.

If you have any questions, feel free to contact the Cross Connection Control Supervisor at the above address or you may phone «Org_Phone ».

Sincerely,

«Org_Signature »

Exhibit 7: First Notice to Test Existing Backflow Prevention Device



«LetterSentDate :Month Day, Year:Internal date long»

**TEST FORM DUE
NO LATER THAN: «ResponseDueDate »
First Notice to Test**

«Mailing_Address »

Re: Backflow Prevention Assembly Test Report Due

Dear «Mail_Greeting »:

The City of Oxford Ordinance 2373, requires annual testing of backflow prevention devices to ensure their ability to prevent a backflow incident. This testing and certification must be performed by a State of Ohio certified backflow prevention technician and requires the appropriate City of Oxford permit. Permits are obtainable at the Municipal Building at 101 East High Street for a charge of \$25.00 for each permit/device (effective 1/8/05). All costs involved with this procedure are the responsibility of the property owner/manager.

Our records indicate that the backflow prevention device(s) at the above address is due for annual testing. City Ordinance requires you to arrange for the inspection, test, and re-certification of your backflow device at the aforementioned service address. A copy of the re-certification document should be forwarded to the Inspections office by «ResponseDueDate ».

Thank you for your continued commitment to our water system. If you have any questions, please call (513) 524-0203.

Sincerely,

«Org_Signature »

Assemblies Due to be Tested:

«FacAssembList »

Exhibit 8: Second Notice to Test Existing Backflow Prevention Device



«LetterSentDate :Month Day, Year:Internal date long»

TEST FORM DUE
NO LATER THAN: «ResponseDueDate :Month Day, Year:Internal date long»

«Mailing_Address »

RE: Second Notice to Test Existing Backflow Prevention Device

Dear «Mail_Greeting »:

We previously mailed you a notice that it is time to have your backflow prevention device(s) tested. It is required that a State of Ohio certified backflow prevention technician examine, test and re-certify your backflow device(s). An appropriate City of Oxford permit is required for this work. Permits are obtainable at the Municipal Building at 101 East High Street. The current cost for each permit is \$25.00 (effective 1/8/05).

This certification must be returned to the City of Oxford Inspections Office. You are required to take immediate action on this matter in order to avoid a discontinuation of water service within the next 30 days.

Your attention to this matter would be appreciated. If you have any questions, please call (513) 524-0203.

Sincerely,

«Org_Signature »

Over Due Assemblies:

«FacAssembList »

Exhibit 9: Final Notice to Test Existing Prevention Device



«LetterSentDate :Month Day, Year:Internal date long»

TEST FORM DUE
NO LATER THAN: «ResponseDueDate :Month Day, Year:Internal date long»
Final Notice to Test

VIA CERTIFIED MAIL/RETURN RECEIPT REQUESTED

«Mailing_Address »

RE: FINAL NOTICE - Non compliance with this notification will subject service
address to water service disconnect without further notice.

Dear «Mail_Greeting »:

On two previous occasions, you were mailed requests to initiate action to have your backflow prevention device(s) tested. It is required that a State of Ohio certified backflow prevention technician examine, test and re-certify your backflow device(s). An appropriate City of Oxford permit is required for this work. This permit can be obtained at the City of Oxford Municipal Building in the Inspections office.

Our records indicate that there has been no response from you on this matter. In order to ensure uninterrupted water service for this property, it is required that you arrange for re-certification of the existing device(s) no later than 10 days from receipt of this letter.

If we can be of further assistance to meet this requirement, please call (513) 524-0203.

Sincerely,

«Org_Signature »

Over Due Assemblies:
«FacAssembList »