

ORDINANCE NO. 1336

AN ORDINANCE OF THE CITY OF BURLEY KNOWN AS THE CITY OF BURLEY WATER SYSTEM PROTECTION ORDINANCE; ESTABLISHING GENERAL POLICY; DEFINING TERMS; PRESCRIBING REQUIREMENTS FOR THE USE OF BACKFLOW PREVENTION DEVICES; PROHIBITING CROSS CONNECTION; PROVIDING FOR VIOLATIONS AND PENALTIES; PROVIDING FOR THE CESSATION OF WATER SERVICE; PROVIDING A SAVING CLAUSE; REPEALING BURLEY ORDINANCE 1256; AND PROVIDING AN EFFECTIVE DATE;

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF BURLEY, IDAHO:

1.1 PURPOSE: The purpose of this Ordinance is:

- 1.1.1 To protect the public potable water supply of the City of Burley from the possibility of contamination or pollution by isolating within its customers' internal distribution system(s) or its customers' private water system(s) such contaminants or pollutants which could backflow or back-siphon into the public water supply system; and
- 1.1.2 To promote the elimination or control of existing cross-connections, actual or potential, between its customers' in-plant potable water system(s) and non-potable water systems, plumbing fixtures and industrial piping systems' and
- 1.1.3 To provide for the maintenance of a continuing Program of Cross-Connection Control which will systematically and effectively prevent the contamination or pollution of all potable water systems.

1.2 RESPONSIBILITY: The City Water Superintendent shall be responsible for protection of the public potable water distribution system from contamination or pollution due to the backflow or back-siphonage of contaminants or pollutants through the water service connection. If, in the judgment of said City Water Superintendent, an approved backflow prevention device is required, for the safety of the water system, the writing to said customer to install such an approved backflow prevention device at an appropriate place on or at the premises of the customer shall provide notice of the needed protection. The customer shall immediately install such approved device or devices at customer's own expense; and failure, refusal or inability on the part of the customer to install said device or devices immediately shall constitute grounds for discontinuing water service to the premises until such device or devices have been properly installed.

Section 2. DEFINITIONS

- 2.1 Approved Device. Accepted by the City Water Superintendent as meeting the applicable specifications in the latest edition of the AWWA Pacific Northwest Section *Cross Connection Control Manual*, the University of Southern California *Manual of Cross-Connection Control*, and *Facility and Design Standards* found in the Idaho Rules for Public Drinking Water Systems (IDAPA 58.01.08.543).

- 2.2 Auxiliary Water Supply. Any water supply on or available to the premises other than the City's approved public potable water supply. These auxiliary waters may include water from another public potable water supply or any natural source(s) such as a well, spring, river, stream, etc., or "used waters" or "industrial fluids". These waters may be polluted or contaminated or they may be objectionable and constitute an unacceptable water source over which the City does not have sanitary control.
- 2.3 Backflow. The flow of contaminated water or other non-potable liquids, mixtures, or substances under pressure into the distributing pipes of a potable water supply system from any source or sources other than its intended source.
- 2.4 Back-siphonage. The flowing back of used, contaminated, or polluted water from a plumbing fixture or vessel into a water supply due to a negative pressure in such a pipe.
- 2.5 Back Pressure Backflow: Backflow due to an increased pressure above the supply pressure, which may be due to pumps, boilers, gravity or other sources of pressure.
- 2.6 Backflow Preventer. A device or means designed to prevent backflow or back-siphonage.
- 2.6.1 Air-Gap. 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 said vessel.
- 2.6.2 Reduced Pressure Principle Device. An assembly of two independently operating approved check valves with an automatically operating differential relief valve between the two check valves, tightly closing shut off valves on either side of the check valves, plus properly located test cocks for the testing of the check and relief valves. The device shall operate to maintain the pressure in the zone between the two check valves at a level less than the pressure on the public water supply side of the device. At cessation of normal flow the pressure between the two check valves shall be less than the pressure on the public water supply side of the device. In case of leakage of either of the check valves the differential relief valve shall operate to maintain the reduced pressure in the zone between the check valves by discharging to the atmosphere. When the inlet pressure is two pounds per square inch or less, the relief valve shall open to the atmosphere. To be approved these devices must be readily accessible for in-line maintenance and testing and be installed in a location where no part of the device will be submerged.
- 2.6.3 Double Check Valve Assembly. An assembly of two independently operating approved check valves with tightly closing shut-off valves on each side of the check valves, plus properly located test cocks for the testing of each check valve. To be approved these devices must be readily accessible for in-line maintenance and testing.
- 2.6.4 Pressure Vacuum Breaker with Internal Check Valve. Pressure vacuum breaker assemblies consist of a check valve (sometimes two), vacuum relief, inlet and discharge shutoffs, and properly installed test cocks. The pressure

vacuum breaker has a vacuum relief valve which is internally loaded, normally by means of a spring. This spring loading allows the device to be installed on the pressure side of a shutoff valve.

2.6.5 Atmospheric Vacuum Breaker. An atmospheric vacuum breaker is a device which allows air to enter the water line when the line pressure is reduced to a gauge pressure of zero or below. The atmospheric vacuum breaker is designed to prevent back-siphonage only. It is not effective against back flow due to backpressure and shall not be installed where it will be under continuous operating pressure for more than 12 hours in any 24-hour period. Poppets of all atmospheric vacuum breakers should be precision fitted to insure positive closure.

2.7 City. The City of Burley, who is the water purveyor invested with the authority and responsibility for the implementation of an effective cross-connection control program and for the enforcement of the provisions of this Ordinance.

2.8. Contamination. Means an impairment of the quality of the potable water by any fluid, gas, or substance other than the intended potable water with which the system is supplied.

2.9. Cross-Contamination. Any physical connection or arrangement of piping or fixtures between two otherwise separate piping systems one of which contains potable water and any fluid, gas, or substance of questionable safety, through which, or because of which, backflow or back-siphonage may occur into the potable water system. A water service connection between a public potable water system and a customer's water distribution system which is cross-connected to a contaminated fixture, industrial fluid system or with a potentially contaminated supply or auxiliary water system, constitutes one type of cross-connection. Other types of cross-connections include connectors such as swing connections, removable sections, four-way plug valves, spools, dummy sections of pipe, swivel or change-over devices, sliding multiport tube, solid connections, etc.

2.10. Cross-Connections – Controlled. A connection between a potable water system and a non-potable water system with an approved backflow prevention device properly installed that will continuously afford the protection commensurate with the degree of hazard.

2.11. Cross-Connection Control By Containment. The installation of an approved backflow prevention device at the water service connection to any customer's premises where it is physically and economically infeasible to find and permanently eliminate or control all actual or potential cross-connections within the customer's water system; or, it shall mean the installation of an approved backflow prevention device on the service line leading to and supplying a portion of a customer's water system where there are actual or potential cross-connections which cannot be effectively eliminated or controlled at the point of cross-connection.

2.12 Hazard, Degree of. The term is derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

- 2.12.1 Hazard – Health. Any condition, device, or practice in the water supply system and its operation which could create, or in the judgment of the City Water Superintendent may create a danger to the health and well-being of the water consumer. An example of a health hazard is a structural defect, including cross-connections, in a water supply system.
- 2.12.2 Hazard – Plumbing. A plumbing type cross-connection in a consumer’s potable water system that has not been properly protected by a backflow prevention device. Unprotected plumbing type cross-connections are considered to be a health hazard.
- 2.12.3 Hazard – Pollutonal. An actual or potential threat to the physical properties of the water system or to the potability of the public or the consumer’s potable water system but which would constitute a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances, but would not be dangerous to health.
- 2.12.4 Hazard – System. An actual or potential threat of severe damage to the physical properties of the public potable water system or the consumer’s potable water system or of a pollution or contamination which would have a protracted effect on the quality of the potable water in the system.
- 2.13 Industrial Fluids System. Any system containing any fluid, gas, or substance other than the intended potable water with which the system is supplied which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollutonal or plumbing hazard if introduced into an approved water supply. This may include, but not be limited to: polluted or contaminated water; all types of process waters and used water: originating from the public potable water system which may have deteriorated in sanitary quality; chemicals in fluid form; plating acids and alkalies, circulated cooling waters connected to an open cooling tower and/or cooling towers that are chemically or biologically treated or stabilized with toxic substances; contaminated natural waters such as from wells, springs, streams, rivers, bays, harbors, seas, irrigation canals, or systems, etc.; oils, gases, glycerin, paraffin, caustic and acid solutions and other liquid and gaseous fluids used in industrial or other purposes or for fire-fighting purposes.
- 2.14 Pollution. Means the presence of any foreign substance (organic, inorganic, or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonable affect such waters for domestic use.
- 2.15 Water – Potable. Any water which, according to recognized standards is safe for human consumption.
- 2.16 Water – Nonpotable. Water which is not safe for human consumption or which is of questionable potability.
- 2.17 Water – Service Connections. The terminal end of a service connection from the public potable water system; i.e., where the City loses jurisdiction and sanitary control over the water at its point of delivery to the customer’s water system. If a meter is installed at the

end of the service connection, then the service connection shall mean the downstream end of the meter. There should be no unprotected takeoffs from the service line ahead of any meter or backflow prevention device located at the point of delivery to the customer's water system. Service connection shall also include water service connection from a fire hydrant and all other temporary or emergency water service connections from the public potable water system.

- 2.18 Water – Used. Any water supplied by the City's public potable water system to a consumer's water system after it has passed through the point of delivery and no longer under the sanitary control of the City.

Section 3. REQUIREMENTS

- 3.1 Water System. The water system shall be considered as made up of two parts: The Utility System and the Customer System.

- 3.1.1 Utility System shall consist of the source facilities and the distribution system; and shall include all those facilities of the water system under the complete control of the utility, up to the point where the customer's system begins.
- 3.1.2 The source shall include all components of the facilities utilized in the production, treatment, storage, and delivery of water to the distribution system.
- 3.1.3 The distribution system shall include the network of conduits used for the delivery of water from the source to the customer's system.
- 3.1.4 The customer's system shall include those parts of the facilities beyond the termination of the utility distribution system which are utilized in conveying utility-delivered domestic water to points of use.

3.2. Facilities;

- 3.2.1 No water service connection to any premises shall be installed or maintained by the City unless the water supply is protected as required by State laws and standards referred to by this Ordinance. Service of water to any premises shall be discontinued by the City Water Superintendent if a backflow prevention device required by this Ordinance is not installed, tested and maintained, or if it is found that a backflow prevention device has been removed, by-passed, or if an unprotected cross-connection exists on the premises. Assemblies that cannot pass annual tests or those found to be defective shall be repaired, replaced, or isolated within ten (10) business days. If the failed assembly cannot be repaired, replaced, or isolated within ten (10) business days, water service to the failed assembly shall be discontinued. Service will not be restored until such conditions or defects are corrected.
- 3.2.2 The customer's system should be open for inspection at all reasonable times to authorized representatives of the City to determine whether cross-connections or other structural or sanitary hazards, including violations of these regulations, exist.

When such a condition becomes known, the City Water Superintendent shall deny or immediately discontinue service to the premises by providing for a physical break in the service line until the customer has corrected the condition(s) in conformance with State and City ordinances relating to plumbing and water supplies and the regulations adopted pursuant thereto.

3.2.3 A premise isolation or containment approved backflow prevention device shall also be installed on each service line to a customer's water system at or near the property line or immediately inside the building being served; but, in all cases, before the first branch line leading off the service line wherever the following conditions exist:

3.2.3 (a) In the case of premises having an auxiliary water supply which can supply water to the customer through an auxiliary water supply. The public water system shall be protected against backflow from the premises by installing a backflow prevention device in the service line appropriate to the degree of hazard.

3.2.3 (b) In the case of premises on which any industrial fluids or any other objectionable substance is handled in such a fashion as to create an actual or potential hazard to the public water system shall be protected against backflow from the premises by installing a backflow prevention device in the service line appropriate to the degree of hazard. This shall include the handling of process waters and waters originating from the utility system which have been subject to deterioration in quality.

3.2.3 (c) In the case of premises having (1) internal cross-connections that cannot be permanently corrected and controlled, or (2) intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impractical or impossible to ascertain whether or not public water system shall be protected against backflow from the premises by installing a backflow prevention device in the service line.

3.2.3 (d) In the case of a wet fire system connections.

3.2.4 The type of protective device required under subsections 3.2.3.(a) (b) (c) and (d) shall depend upon the degree of hazard which exists as follows:

3.2.4 (a) In the case of any premises where there is an auxiliary water supply as stated in subsection 3.2.3. (a) of this section and it is not subject to any of the following rules, the public water system shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention device.

3.2.4 (b) In the case of any premises where there is water or substance that would be objectionable but not hazardous to health, if introduced into the public water system, the public water system shall be protected by an approved double check valve assembly.

3.2.4 (c) In the case of any premises where there is any material dangerous to health which is handled in such a fashion as to create an actual or potential hazard to the public water system, the public water system shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention device. Examples of premises where these conditions may exist include sewage treatment plants, sewage pumping stations, chemical manufacturing plants, hospitals, mortuaries and plating plants.

3.2.4 (d) In the case of any premises where there are “uncontrolled” cross-connections either actual or potential, the public water system shall be protected by an approved air-gap separation or an approved backflow prevention device at the service connection.

3.2.4 (e) In the case of any premises where, because of security requirements or other prohibitions or restrictions it is impossible or impractical to make a complete in-plant cross-connection survey, the public water system shall be protected against backflow or back-siphonage from the premises by the installation of a backflow prevention device in the service line. In this case maximum protection will be required that is, an approved air-gap separation or an approved reduced pressure principle backflow prevention device shall be installed in each service to the premises.

3.2.4 (f) In the case of a wet fire systems connection where there is an actual or potential danger to pollution or contamination of such system, the public water system shall be protected by a reduced pressure principle backflow prevention device or a double check valve assembly.

3.2.5 Any backflow prevention device required herein shall be of a model and size approved by the City Water Superintendent and listed in the University of Southern California (USC) Foundation for Cross-Connection Control and Hydraulic Research List of Approved Backflow Prevention Assemblies. If double check valve backflow prevention assemblies and/or reduced pressure principle backflow prevention assemblies are used, they must pass a performance test conducted by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research. In addition, they shall meet American Water Works Association (AWWA) Standards C-510 or C-511, or an equivalent standard approved by the City Water Superintendent. If atmospheric vacuum breakers and/or pressure vacuum breakers are used, they shall be marked approved by the International Association of Plumbing and Mechanical Officials (IAPMO) or by the American Society of Sanitation Engineers (ASSE). Pressure vacuum breakers must pass a performance test conducted by the University of Southern California Foundation for Cross Connection Control and Hydraulic Research.

The following testing laboratory has been qualified by the City Water Superintendent to test and certify backflow preventers.

Foundation for Cross-Connection Control & Hydraulic Research

University of Southern California
University Park
Los Angeles, California 90007

Testing laboratories other than the laboratory listed above will be added to an approved list as they are qualified by the City Water Superintendent. Backflow preventers, which may be subjected, to back pressure or back siphonage that have been fully tested and have been granted a Certificate of Approval by said qualified laboratory and are listed on the laboratory's current list of "Approved Devices" may be used without further test or qualification.

- 3.2.6. It shall be the duty of the customer-user at any premise where backflow prevention devices are installed to have the device pass a certified inspection and operational tests made at the time of installation and at least once per year thereafter. In those instances where the City Water Superintendent deems the hazard to be great enough, the City Water Superintendent may require certified inspections at more frequent intervals. These inspections and tests shall be performed by a certified tester approved by the City Water Superintendent and the Idaho Bureau of Occupational Licenses. It shall be the duty of the City Water Superintendent to see that these timely tests are made. The customer-user shall notify the City Water Superintendent in advance when the tests are to be undertaken so that he or his representatives may witness the tests if it is so desired. These devices shall be repaired, overhauled, or replaced at the expense of the customer-user whenever said devices are found to be defective. Records of such tests, repairs, and overhaul shall be kept and made available to the City Water Superintendent.
- 3.2.7. All presently installed backflow prevention devices which do not meet the requirements of this section but were approved devices for the purposes described herein at the time of installation and which have been properly maintained, shall, except for the inspection and maintenance requirements of these under subsection 3.2.6, be excluded from the requirements of these rules so long as the City Water Superintendent is assured that they will satisfactorily protect the utility system. Whenever the existing device is moved from the present location or requires more than minimum maintenance or when the City Water Superintendent finds that the maintenance constitutes a hazard to health, the unit shall be replaced by a backflow prevention device meeting the requirements of this Ordinance.
- 3.2.8. On new installations, the Department will provide on-site evaluation and/or inspection of plans in order to determine the type of backflow preventer, if any, that will be required, will issue permits if required, and perform inspection and testing. Owners and/or installers of water services shall allow City Personnel to inspect water system connections and service line installations prior to backfilling operations in order to insure that installations are in compliance with local and State regulations.

4. VIOLATIONS AND PENALTIES:

4.1 Any person who violates, omits, disobeys, neglects, refuses to comply with any of the provisions of this Ordinance or any other rules and regulations with regard to Cross-connection adopted by the City of Burley, shall be deemed guilty of a misdemeanor or felony. Each day in which the violation occurs shall continue to be deemed a separate offense.

4.2 Any person violating any of the provisions of this Ordinance shall also be liable to the City of Burley for any expense, loss, or damage, occasioned by the City by reason of such violation.

4.3 Any person violating the provisions of this Ordinance will be denied delivery of water until the violation is corrected.

4.4 Assemblies that cannot pass annual tests or those found to be defective shall be repaired, replaced, or isolated within ten (10) business days. If the failed assembly cannot be repaired, replaced, or isolated within ten (10) business days, water service to the failed assembly shall be discontinued.

5. FEES AND CHARGES:

5.1 The City reserves the right to assess or impose fees or charges for the following services or permits:

- 1) Testing Fees;
- 2) Re-testing Fees;
- 3) Fee for re-inspection
- 4) Charges for after-hours inspections and/or tests;
- 5) Cross-connection permits.

The City of Burley is hereby authorized to review rates periodically and change rates accordingly if deemed appropriate to insure continued proper operation of the system. The City is hereby directed and authorized to provide for annual notification of water system fees and costs to users. User connections fee rates are subject to review periodically and the City is hereby authorized to change such rates if deemed appropriate to insure continued operation of the system.

6. SAVINGS CLAUSE:

6.1 If any section, paragraph, sentence or provision of this Ordinance or the application thereof to any particular circumstance shall ever be declared to be invalid or unenforceable by a court of competent jurisdiction, such decision shall not affect the remainder hereof, which shall continue in full force and effect and applicable to all circumstances to which it may apply.

7. REPEAL:

7.1 Burley Ordinance 1256 is hereby repealed.

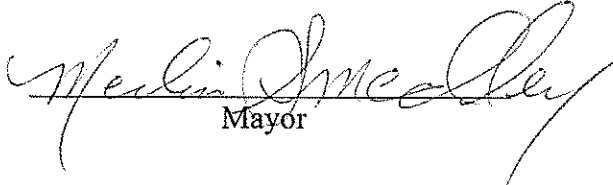
8. EFFECTIVE DATE:

8.1 This Ordinance shall be in full force and effect from and after its passage, approval and publication in accordance with law.

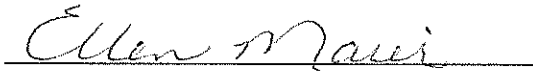
PASSED by the City Council and approved by the Mayor this 5th day of September, 2017.

City of Burley

ATTEST:



Mayor



City Clerk