### LDWA RES 2015-04 (fka 2015-12)

### **LOCAL AUTHORITY:**

# REQUIRED BY THE DDW/DEQ CROSS CONNECTION CONTROL PROGRAM IAW STATE OF UTAH RULE 309 & IPC

OFFICIALLY ADOPTED BY THE LDWA BOARD OF DIRECTORS, 2016.01.07

### SECTION 1. CROSS CONNECTION CONTROL - GENERAL POLICY.

### 1.1. PURPOSE OF THIS RULE.

- 1.1.1. Compliance of this Rule is a requirement of the Division of Drinking Water (DDW), Department of Environmental Quality (DEQ), Division of Water Quality (DWR), the International Plumbing Code (IPC), Utah Public Drinking Water Rules (UPDWR) and the State of Utah, and is for the protection of the Leeds Domestic Waterusers Association (LDWA) public culinary drinking water supply from the possibility of contamination or pollution. These federal and state agencies require a Cross Connection Control of all public drinking water systems within the State of Utah; and
- 1.1.2. Compliance with the minimum safety codes specified herein will be considered reasonable diligence for the prevention of contaminants or pollutants which could backflow into the public drinking water system; and
- 1.1.3. To promote the reasonable elimination or control of cross connections in the plumbing fixtures and industrial piping system(s) of the LDWA Shareholder, as required by Utah state regulations and the IPC to assure water system safety; and
- 1.1.4. To provide for the administration of a continuing program of backflow prevention, to systematically examine risk and effectively prevent contamination or pollution of the drinking water system.

### 1.2. RESPONSIBILITY OF THE DRINKING WATER PURVEYOR (LDWA).

- 1.2.1. The State of Utah Division of Drinking Water (DDW) and Department of Environmental Quality (DEQ) recognize LDWA as the Drinking Water Purveyor to Leeds Town municipality located in Washington County, Utah; LDWA is therefore responsible for the protection of the drinking water distribution system from foreseeable conditions leading to the possible contamination or pollution of the drinking water system due to the backflow of contaminants or pollutants into the drinking water supply.
- 1.2.2. LDWA, as the Drinking Water Purveyor, is required to complete inspections of its Shareholders' water distribution system(s), and shall be conducted or cause to be conducted by individuals authorized, qualified by, and representing LDWA. Survey

- records shall indicate compliance with the State of Utah Regulations, be maintained by LDWA, and made available for the reviews and approval by the State of Utah Agencies.
- 1.2.3. LDWA is required to schedule and notify its Shareholders in writing of the requirement for periodic system inspection surveys to ensure compliance with existing applicable minimum health and safety standards established by the State of Utah.
- 1.2.4. Selection of an approved backflow prevention assembly for containment control required at the service entrance shall be determined from the results of the system surveys.

#### 1.3. RESPONSIBILITY OF LDWA SHAREHOLDERS.

- 1.3.1. To comply with this Rule as a term and condition of water supply, LDWA Shareholders' acceptance of water service is admittance of his/her awareness of his/her responsibilities as a water system user.
- 1.3.2. It shall be the responsibility of the LDWA Shareholder to purchase, install, and arrange testing and maintenance of any backflow prevention device/assembly required to comply with this Rule. Failure to comply with this Rule shall constitute grounds for discontinuation of water service.

### 1.4. RESPONSIBILITY OF THE LDWA INSPECTOR.

- 1.4.1. The Water Purveyor's Inspector is responsible to enforce the International Plumbing Code (IPC) beginning at the point of service, downstream on Shareholder side of the meter, and continuing throughout the length of Shareholder's water system.
- 1.4.2. The Inspector will review all plans to ensure that unprotected cross connections are not an integral part of the Shareholder's water system. If a cross connection cannot be eliminated, it must be protected by the installation of an air gap or an approved backflow prevention device/assembly, in accordance with the Approved Vendor List provided by the DDW (Appendix A).

## 1.5. RESPONSIBILITY OF INSPECTOR, REPAIR PERSON OR CERTIFIED BACKFLOW TECHNICIAN.

- 1.5.1. The person employed by either the Shareholder or the Water Purveyor (LDWA) to inspect, test, repair or maintain backflow prevention assemblies must be a certified Backflow Technician licensed and recognized by the State of Utah and shall have all the following responsibilities:
- a. Ensure that acceptable testing equipment and procedures are used for testing, repairing, or overhauling backflow prevention assemblies.

- b. File reports of such testing and/or repairs to the Shareholder and the LDWA Water Purveyor using the Form provided by the DDW approved for such use by the Water Purveyor (Appendix B).
- c. Include a list of the materials or replacement parts listed in the reports.
- d. Ensure that replacement parts are equal in quality to parts originally supplied by the manufacturer of the assembly being repaired.
- e. Ensure the design of the material or operational characteristics of the assembly during testing, repair or maintenance is unchanged.
- f. Perform all tests of the mechanical devices/assemblies and ensure the competence and accuracy of all tests and reports.
- g. Ensure that his/her license is current, the testing equipment being used is acceptable by the State of Utah, and is in proper operating condition.
- h. Licensed to be equipped with and competent to use all necessary tools, gauges, and other equipment necessary to properly test and maintain backflow prevention assemblies.
- i. Identify by clearly labeling or marking each double check valve, pressure vacuum breaker, reduced pressure backflow assembly and high hazard air gap, with the serial number, date tested, name of the tester's company, and the tester's name.

### 1.6. RESPONSIBILITY FOR REPAIR OF THE BACKFLOW ASSEMBLIES.

In the case of a Shareholder requiring an assembly be tested, the Certified Backflow Technician is authorized to make the test, complete a written report on the form supplied to them by LDWA, and provide a copy to the Shareholder and the LDWA Water Purveyor. The installation, replacement or repair of assemblies must be made by a tester having the required licensure from the Division of Occupational and Professional Licensing, except when the Backflow Technician is an agent of the assembly owner.

### **SECTION 2. DEFINITIONS.**

- **2.1. BACK-PRESSURE**. The flow of water or other liquids, mixtures, or substances from a region of high pressure to a region of lower pressure into the water distribution pipes of a potable water supply system from any source(s) other than the intended source.
- **2.2. BACK-SIHPONAGE**. The flow of water or other liquids, mixtures, or substances under vacuum conditions into the intended source(s), caused by the reduction of pressure in

- the potable water system.
- **2.3. BACKFLOW**. The reversal of the normal flow from a residential or commercial water system back into the public drinking water system, caused by back-pressure or back-siphonage. A backflow incident may carry pollutants or contaminants back into the public drinking water supplies making them unsafe for use.
- **2.4. BACKFLOW ASSEMBLIES & DEVICES, APPROVED**. An assembly or device that meets and applicable specification or as suitable for the proposed use and is accepted by the Utah State Department of Environmental Quality (DEQ) and the Division of Drinking Water (DDW), as referenced in Appendix A of this Rule.
- **2.5. BACKFLOW PREVENTION ASSEMBLY.** An assembly or means designed to prevent backflow. Specifications for backflow prevention assemblies are contained within the ICC Plumbing Code, as adopted by the State of Utah and in the Cross Connection Program for Utah maintained by the DDW.
- **2.6. CONTAMINATION**. Degradation of the quality of the potable water supply by sewage, industrial liquids, waste liquids, compounds, or other materials that may create a health hazard.
- **2.7. CROSS CONNECTION**. Any physical connection or arrangement of piping or fixtures which may allow non-potable water or industrial fluids or other materials of questionable quality to come into contact with potable water inside a water distribution system. This would include temporary conditions, such as swing connections, removable connections, four way plug valves, spools, dummy sections of pipe, swivel or change-over devices or sliding multiport tubes or other plumbing arrangements.
- 2.8. CROSS CONNECTION, CONTAINMENT. The installation of an approved backflow assembly at the water service connection to any Shareholder's premises where it is physically and economically infeasible to find, permanently eliminate, or control all actual or potential cross connections within the Shareholder's water distribution system; or, it shall mean the installation of an approved backflow prevention assembly on the service line leading to and supplying a portion of a Shareholder's water system where there are actual or potential cross connections which cannot be effectively eliminated or controlled at the point of the cross connection, thus providing isolation of the system.
- **2.9. CROSS CONNECTION, CONTROLLED**. A connection between a potable water system and a non-potable water system with an approved backflow prevention assembly device properly installed and maintained so that it will continuously afford the protection commensurate with the degree of hazard.

- **2.10. HOSE BIBB**. An outdoor water faucet protruding from a building, which is usually threaded to accept a hose connection.
- **2.11. HOSE COCK**. A water faucet placed at about sill height on the outside of a building and usually threaded for attaching a hose —called also sill cock.
- **2.12. HOSE CONNECTION TO HOSE BIBB, THREADED**. A garden hose that is connected to a threaded hose bibb or faucet. (See Plumbing Code, IPC)
- **2.13. PLUMBING CODE, INTERNATIONAL (IPC).** International Rules that require all cross connections be eliminated or protected against backflow by installation of an approved backflow device or assembly and has been adopted with additional amendments by the State of Utah Division of Drinking Water. The IPC requires all threaded potable water outlets, hose bibs or sill cocks, be protected by a non-removable hose bibb vacuum breaker or an atmospheric vacuum breaker.
- **2.14. SHAREHOLDER, LDWA.** For the purpose of this Rule, the LDWA Shareholder is the property owner and is responsible for repairs of all cross-connections on their property.
- **2.15. SILL COCK**. A water faucet placed at about sill height on the outside of a building and usually threaded for attaching a hose —called also hose cock.
- **2.16. VACUUM BREAKER, ATMOSPEHRIC (AVB)**. A type of backflow prevention device with a hood on its top to allow air to enter the water system if a siphon attempts to form. AVBs require continuous pressure, cannot be installed underground, or in an enclosure containing air contaminants.
- 2.17. VACUUM BREAKER, PRESSURE (PVB). A type of backflow prevention device used to keep non-potable or contaminated water from entering the water supply. A PVB is similar to an atmospheric vacuum breaker (AVB), except that the PVB contains a spring-loaded poppet. This makes it acceptable for applications that are high hazard or where valves are downstream. Pressure vacuum breakers must be protected from freezing when installed outdoors. PVBs usually have test cocks, to which specially-calibrated gauges are attached, in order to ensure they are functioning properly.
- **2.18. WATER PURVEYOR, DRINKING WATER**. The department, agency, person(s), association, or other entity designated to be in charge of the public water utility, vested with the authority, is responsible for the implementation of an effective Cross Connection Control Program, and is responsible for the enforcement of the provisions of this Rule.
- **2.19. WATER, NON-POTABLE**. Water that does NOT meets the quality, health, safety, and welfare requirements of the DDW, DEQ, DWR and State of Utah Codes for public drinking water supplies, and is not of drinking water quality.

- **2.20. WATER, POTABLE**. Water that meets the quality, health, safety, and welfare requirements of the DDW, DEQ, DWR and State of Utah Codes for public drinking water supplies.
- **2.21. WATER SUPPLY, AUXILIARY**. Any water supply on or available to the premises *other than* the purveyor's public water supply is considered an auxiliary water supply. These auxiliary water supplies may include water from another purveyor's 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 contaminated, polluted, or they may be objectionable and constitute an unacceptable water source over which the Water Purveyor does not have authority for the sanitary control.

### **SECTION 3. REQUIREMENTS.**

### 3.1. RULE POLICY.

- 3.1.1. No water service connection to any premises shall be installed or maintained by the Water Purveyor unless the water supply is protected as required by the State of Utah laws, regulations, codes, and this Rule. Service of water to a Shareholder found to be in violation of this Rule is required to be discontinued by the Water Purveyor after due process of written notification of violation and an appropriate time suspense for voluntary compliance, if:
  - a. A backflow prevention assembly required by this Rule for the control of backflow and cross connections is not installed, tested, and maintained; or
  - b. If it is found that a backflow prevention assembly has been removed or by-passed; or
  - c. If an unprotected cross connection exists on the premises; or
  - d. If the periodic system survey has not been conducted.

Service will not be restored until such conditions or defects are corrected.

- 3.1.2. The Shareholder's system(s) shall be open for inspection at all reasonable times to authorized representatives of the Water Purveyor to determine whether cross connections or other structural or sanitary hazards, including violation of this Rule exist and to audit the results of the required survey Rule 309-400 of the Utah Administrative Code.
- 3.1.3. Whenever the public Water Purveyor deems a service connection's water usage contributes a sufficient hazard to the water supply, an approved backflow prevention assembly shall be installed on the service line of the identified Shareholder'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.
- 3.1.4. The type of protective assembly required under subsection 3.1.3., shall depend upon the degree of hazard which exists at the point of cross connection, whether direct or indirect, applicable to local and state requirements or resulting from the required survey(s).
- 3.1.5. All presently installed backflow prevention assemblies which do not meet the requirements of this section but were approved assembly device(s) for the purposes described herein at the time of installation and which have been properly maintained, shall, except for the inspection and maintenance requirements under subsection 3.1.6., be excluded from the requirements of these Rules so long as the Water Purveyor is assured that they will satisfactorily protect the public water system. Whenever the assembly device(s) is (are) moved from the present location(s) or, requires more than minimum maintenance or, when the Water Purveyor finds that the operation or the assembly device(s) constitute a hazard to health, the unit shall be replaced by an approved backflow prevention assembly meeting all local and state requirements.
- 3.1.6. It shall be the responsibility of the Shareholder, at any premises where backflow prevention assemblies are installed, to have certified surveys/inspections, and operational testing made at least once per year at the Shareholder's expense. In those instances where the Water Purveyor deems the hazard to be great, he may require certified inspections/surveys and test at more frequent intervals. It shall be the duty of the Water Purveyor to see that these tests are made according to the standards set forth by the State DEQ and DDW.
- 3.1.7. All backflow prevention assemblies shall be tested within ten (10) working days of initial installation.
- 3.1.8. No backflow prevention assemblies shall be installed so as to create a safety hazard. Examples of violations of this Rule include an installation on electrical panels, steam pipes, or above ceiling level.

### 4.0 VIOLATIONS.

If violations of this Rule exist or if there has not been any corrective action taken by the Shareholder within ten (10) days of the written notification of the deficiencies noted within the survey and/or test results, then the Water Purveyor shall deny or immediately discontinue service to the premises by providing a physical break in the service line until the Shareholder has corrected the condition(s) in conformance with all State and local regulations and statutes relating to plumbing, safe drinking water suppliers, and this Rule.

### **LDWA RESOLUTION 2015-04**

A RESOLUTION OF LEEDS DOMESTIC WATERUSERS ASSOCIATION (LDWA), LEEDS, UTAH, ADOPTING DESIGNATION OF LDWA AS THE LOCAL AUTHORITY FOR THE BACKFLOW AND CROSS CONNECTION CONTROL PROGRAM IAW RULE 309 AND INTERNATIONAL PLUMBING CODE (IPC).

BE IT ORDAINED BY THE BOARD OF DIRECTORS OF LEEDS DOMESTIC WATERUSERS ASSOCIATION OF LEEDS, UTAH, AS FOLLOWS:

**WHEREAS**, the Leeds Domestic Waterusers Association (hereinafter "LDWA") is a private non-profit corporation and culinary water provider duly organized and existing under the laws of the State of Utah; and,

WHEREAS, Compliance with the State of Utah Rule 309 and the International Plumbing Code (IPC) is a requirement of the DDW, DEQ, and the Utah Public Drinking Water Rules (UPDWR) and the State of Utah; and,

WHEREAS, LDWA is the Water Purveyor and Local Authority for the municipality of Leeds Town, located in Washington County, Utah, and recognized as such by the Division of Drinking Water (DDW), the Department of Environmental Quality (DEQ) and the State of Utah; and,

**WHEREAS,** the public convenience and necessity, public safety, health and welfare is at issue in this matter and requires the adoption of the Water Conservation Plan by its Board of Directors; now,

THEREFORE, BE IT ORDAINED by the Leeds Domestic Waterusers Association as follows:

ADOPTION OF DESIGNATION AS THE LOCAL AUTHORITY FOR THE BACKFLOW AND CROSS CONNECTION PROGRAM.

That the Board of Directors hereby adopts the *DDW/DEQ CROSS CONNECTION & BACKFLOW PREVENTION PROGRAM* for its service area within the Town of Leeds, Utah.

**REPEALER OF CONFLICTING ENACTMENTS.** All bylaws, amendments, orders, and resolutions with respect to the changes herein enacted and adopted which have heretofore been adopted by LDWA, or parts thereof, which are in conflict with any of the provisions of this Resolution, are, to the extent of such conflict, hereby repealed, except that this repeal shall not be construed to revive any act, order or resolution, or part thereof, heretofore repealed.

**PRIOR BYLAWS, AMENDMENTS, ORDERS, AND RESOLUTIONS.** The body and substance of any and all prior bylaws, amendments, orders, and resolutions, together with their specific provisions, where not otherwise in conflict with this Resolution, are hereby reaffirmed and readopted.

**SAVINGS CLAUSE.** If any provision of this Resolution shall be held or deemed to be or shall, in fact, be invalid, inoperative or unenforceable for any reason, such reason shall not have the effect of rendering any other provision or provisions hereof invalid, inoperative or unenforceable to any extent whatever,

this Resolution and the provisions of this Resolution being deemed to be the separate independent and severable act of the Board of Directors of Leeds Domestic Waterusers Association, Leeds, Utah.

**SECTION 6. DATE OF EFFECT.** BE IT FURTHER ORDAINED that this Resolution shall be effective on the 7<sup>th</sup> day of January 2016.

DATED this 7<sup>th</sup> day of January 2016

LEEDS DOMESTIC WATERUSERS ASSOCIATION

By: Alllion 9

Elliott Sheltman, LDWA Board President

Attested and recorded

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Karen Markovich, LDWA Administrative Manager