

Timber Lakes Water Special Service District

Water Cross Connection Control Policy

WHEREAS, it authorized with Utah's Safe Drinking Water Act, Title 19, Chapter 4, Utah Code Annotated, and applicable State Regulations, including the current version of the "Cross Connection Control Program of Utah, April 2016" a copy of which shall be available at the District's office, 450 W 910 S, Suite 100, Heber City, Utah 84032, or on the web at <https://documents.deq.utah.gov/drinking-water/field-services/DDW-2017-010179.pdf>, and in the public interest to protect the quality of water to the consumers of Timber Lakes Water Special Service District (the "District");

WHEREAS, the public drinking water system operated by the District is a community water system, which maintains compliance with the policies and regulations of the Utah Drinking Water Board hereafter referred to as the "DWB" and the International Plumbing Code hereafter referred to as the "IPC".

WHEREAS, restrictions are necessary to prevent contamination of the water provided to the consumers of the District from cross connections with the District's public drinking water system:

NOW THEREFORE, be it resolved by the District that the following policy be adopted:

Section I. Definitions. The following definitions shall apply in the interpretation and enforcement of this policy:

1. "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 overflow level rim of the receptacle, and shall be at least double the diameter of the supply pipe measured vertically above the flood level rim of the vessel, but in no case less than one inch.

2. "Certified Backflow Technician" means a person who has successfully completed a Utah Division of Drinking Water approved backflow certification course with a written and practical examination, and maintains certification in accordance with DWB rule number R309-305, Certification Rules for Backflow Technicians.

3. "Authorized Representative" means any person designated by the District to administer this Water Cross Connection Policy.

4. "Auxiliary Water Supply" means any water source or system, other than that of the District, which may be available in any building or premises in the Timber Lakes service area.

5. "Backflow Device" means a device manufactured to prevent backflow that is approved by the American Society of Sanitary Engineers (ASSE) and/or the International Association of

Plumbing/ and Mechanical Officials (IAPMO). Correctly installed Air Gaps are considered Backflow Devices.

6. “Backflow Assembly” means any assembly, which is testable and repairable in line and has been approved by the State of Utah.

7. “Backflow” means the flow other than the intended direction of flow, of any foreign liquids, gases, used water, or substances into the District’s public drinking water system.

8. “Consumer” or “Customer” means any individual, firm, partnership, corporation, or agency or their authorized agent receiving water from the District.

9. “Contamination” means an introduction of any substance into the District’s Water System, including sewage, process fluids, chemicals, wastes that would be objectionable. Contamination may be a threat to life or health, or may cause an esthetic deterioration, color, taste, or odor.

10. “Cross Connection” means any actual or potential connection, source or arrangement through which it is possible to introduce into the potable water of the District’s public drinking water system any used water, industrial fluid, gas or other substance other than the intended potable water of the District’s public drinking water system.

11. “Degree of Hazard” means either a pollutant (non-health) or contaminant (health) hazard that may be introduced into the District’s water system through a Cross Connection. Through an evaluation of the Consumer’s plumbing system, the threat to the public health (the degree of hazard) will be determined. In the past, these have been referred to as high hazard for health and low hazard for non-health.

12. “Public Drinking Water System” means the water supply source; distribution system and appurtenances to the service meter operated by the District that supplies potable water to the Consumers.

13. “Consumer’s Water System” means all service pipes, all distribution piping and all appurtenances beyond the service meter of the District’s public drinking water system.

14. “Service Connection” means the terminal end of the service line from the District’s Public Drinking Water System. If a meter is installed at the end of the service, then the service connection means downstream from the end of the meter.

Section II. Cross Connection Control Policy

A. Purpose. The purpose of this policy is:

1. To protect the District’s public drinking water system from any cross connection, contamination or degree of hazard.

2. To promote the elimination, containment, isolation, or control of cross connection between the District's public drinking water system and non-potable water systems, plumbing fixtures, and industrial process systems or other systems, which introduce or may introduce contamination into the District's public drinking water system or the consumer's water system.
3. To provide for the maintenance of a continuing program of cross connection control, which will prevent contamination or any degree of hazard of the District's public drinking water system.

B. Application. This Policy shall apply to all consumers' water systems in the Timber Lakes service area.

C. Intent. This policy will be reasonably interpreted by the District. It is the intent of the District to recognize the varying degrees of hazard and to apply the principle that the degree of protection shall be commensurate with the degree of hazard.

D. Compliance. If, in the judgment of the District or its authorized representative, cross connection protection is required through either piping modification or installation of an approved backflow device or backflow assembly, due notice shall be given to the consumer. The consumer shall immediately comply by providing the required protection by a certified backflow technician at the consumer's personal expense. Failure or refusal or inability on the part of the consumer to provide such protection shall constitute grounds for the discontinuation of water service to the consumer or premises until such protection has been provided. In the event of actual backflow or contamination of the District's public drinking water system, the District may immediately terminate water service to the consumer and may not be restored until the cross connection is eliminated or adequately protected.

Section III. Cross Connections Prohibited

A. No water service connection shall be installed or maintained to any premises where actual or potential cross connections to the District's public drinking water system may exist unless such actual or potential cross connections or contamination are abated or controlled to the satisfaction of the District or its authorized representative.

B. No connection shall be installed or maintained whereby an auxiliary water supply or contamination may enter the District's public drinking water system.

Section IV. Survey and Investigations

A. The consumer's premises shall be open at all reasonable times to the District or its authorized representative for any surveys and investigations of water use practices within the consumer's premises to determine whether there are actual or potential cross connections or contaminations in the consumer's water system.

B. On request by the District or its authorized representative, the consumer shall furnish requested information on water use practices within his premises and in the consumer's water system.

C. On request by the District or its authorized representative, the consumer shall conduct periodic surveys of water use practices on the premises of the consumer's water system to determine whether there are existing or potential cross connections or contaminations. The consumer shall provide the survey results to the District or its authorized representative.

Section V. Where Protection is Required

A. An approved backflow device or assembly shall be installed on each consumer's water system wherein the judgment of the District or its authorized representative and actual or potential cross connection, contamination, or degree of hazard exists. The type and degree of protection required shall be commensurate with the degree of hazard and/or type of contamination that may enter the District's public drinking water system.

B. An approved air gap separation or reduced pressure principle backflow assembly or backflow device shall be installed at any location on the consumer's water system or within any premises where the District, or its authorized representative, determines the nature and extent of activities or the materials used or stored in connection with the activities would present a degree of hazard or contamination of the District's public drinking water system. This includes but is not limited to the following situations:

1. Premises having auxiliary water supply, unless the quality of the auxiliary supply is acceptable to the District or its authorized representative and the IPC as adopted by the State of Utah.

2. Premises having internal plumbing arrangements, which make it impractical to ascertain whether or not a cross connection, degree of hazard or contamination exists.

3. Premises where entry is restricted so that inspections for cross connections cannot be made with sufficient frequency or at sufficiently short notice to assure the cross connections, degree of hazard and contaminations do not exist.

4. Premises having a repeated history of cross connections being established or re-established.

5. Premises, which due to the nature of the enterprise therein, are subject to recurring modification or expansion.

6. Premises on which any substance is handled under pressure so as to permit entry into the public water supply system, or where a cross connection could reasonably be expected to occur. This shall include the handling of process waters, boilers, fire sprinklers, floor heating, and cisterns.

7. Premises where toxic or hazardous materials are handled or stored.

Section VI. Backflow Prevention Assemblies and Devices

A. Any backflow device or backflow assembly required by this policy shall be of a model or construction approved by the District or its authorized agent.

1. Air gap separation to be approved shall be at least twice the diameter of the supply pipe, measured vertically above the top rim of the vessel, but in no case less than one inch.

2. Double check valve or reduced pressure principle backflow prevention assemblies shall appear on the current list of approved backflow prevention assemblies established by the Utah Division of Drinking Water, unless the assembly was installed when it was acceptable by regulations, which have changed since the assembly was installed. The double check valve assembly must comply with yearly-required inspection and maintenance.

Section VII. Installation

A. Backflow prevention assemblies and devices required by this policy shall be installed at a location and in a manner approved by the District or its authorized agent. All assemblies and devices shall be installed at the expense of the consumer, unless the District or its authorized representative agrees otherwise.

B. Backflow devices and backflow assemblies installed at the service connection shall be located on the consumer's side of the water meter, as close to the meter as is reasonably practical, and prior to any other connection.

C. Backflow devices and assemblies shall be conveniently accessible for maintenance and testing, protected from freezing, and where no part of the device will be submerged or subject to flooding by any fluid. **All assemblies and devices shall be installed according to manufacturers' recommendations and by a Utah Certified Backflow Technician, which installation may be monitored by the District or its authorized representative.**

Section VIII. Inspection and Maintenance

A. The consumer is required by this policy to inspect, test, and overhaul backflow prevention assemblies in accordance with the following schedule or more often as determined by the District or its authorized representative.

1. Air gap separations shall be inspected at the time of installation and at least monthly.

2. Double check valve assemblies shall be inspected and tested at the time of installation, when placed in operation, and at least every twelve months thereafter. They shall be dismantled, inspected internally, cleaned, and repaired whenever needed and at least every thirty months.

3. Reduced pressure principle backflow prevention assemblies shall be inspected and tested for tightness at the time of installation, when placed in operation, and at least every twelve months thereafter. They shall be dismantled, inspected internally, cleaned, and repaired whenever needed and at least every five years.

B. Inspections, tests, and overhauls of backflow prevention assemblies shall be made at the expense of the consumer and shall be performed by an approved tester.

C. Whenever backflow prevention assemblies or devices, required by this policy, are found to be defective, they shall be repaired or replaced, without delay and at the consumer's expense.

D. The 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, and repairs. All records of inspections, tests, repairs, and overhauls shall be provided within 30 days to the District or its authorized representative.

E. All backflow prevention devices shall have a tag showing the date of the last inspection, test, or overhaul or other maintenance.

F. Backflow prevention assemblies and devices shall not be bypassed, made inoperative, removed, or otherwise made ineffective without specific authorization by the District or its authorized representative.

Section IX. Violation and Penalties

A. The District or its authorized representative shall deny or discontinue the water service to any premises or any consumer wherein any backflow prevention device required by this policy is not installed, tested, or maintained in a manner acceptable to the District or its authorized representative, or if it is found that the backflow prevention device has been removed or bypassed, or if an unprotected cross connection exists.

B. Water service to such premises shall not be restored until the consumer is in compliance with this policy to the satisfaction of the District or its authorized representative.

C. The District's Termination of Service Policy shall apply with respect to notices, costs, and fees regarding termination of service and reconnection of service.

Section X. Assemblies

The following devices are recognized for cross connection control and backflow prevention by the District:

Air Gap

Gap must be two pipe diameters. Must be inspected annually.

Reduced Pressure Principle Backflow Preventer

Contains two specifically designed, soft seated, independently acting check valves with a reduced pressure zone (with relief valve) between the two checks. Shut off valves before and after the device. Satisfactory for most toxic materials. Higher-pressure loss. (10 psi or more) Must be tested and inspected annually. Repaired as necessary.

Double Check Valve Assembly

Contains two soft-seated independently acting check valves in series. Shut off valves before and after device. Adequate for non-toxic applications only. Minor pressure loss. Must be inspected and tested annually. Repaired as necessary.

Pressure Vacuum Breaker

Pressurized vacuum breakers and spill resistant vacuum breakers must be installed a minimum of 12 inches above highest point of usage. No backpressure, only back siphonage. Can operate under constant pressure (pressure that is constant for periods of over 12 hours in a 24-hour period). Shut off valve can be located beyond the vacuum breaker. Must be inspected and tested annually, and when placed in service.

Atmospheric Vacuum Breaker

Must be installed a minimum of 6 inches above highest point of usage. No backpressure, only back- siphonage. Not for use under constant pressure. Shut off valves must be located ahead of vacuum breaker. Must be inspected every 12 months and repaired as necessary.

Dual Check Valve

A device recognized by the District for cross connection control and backflow prevention.

ADOPTED AND PASSED by the Administrative Control Board of the Timber Lakes Water Special Service District, this ____ day of _____, 2019.

Neil Anderton, President _____

Reg Anderson, Vice President _____

Michael Wheelwright, Treasurer _____

John Blickenstaff _____

Bruce Heyward _____

Steve Farrell, County Representative _____