BAILEYVILLE UTILITIES DISTRICT

CROSS CONNECTION CONTROL PROGRAM

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I. Purpose

A. Cross-connections between water supplies and non-potable sources of contamination represent one of the most significant threats to health in the water supply industry. This program is therefore designed to maintain the safety and potability of the water in Baileyville Utilities District's water system by:

1. Containing at the water service entrance such contaminants or pollutants which could backflow or back-siphon into the Baileyville Utilities District's water system,

2. Promoting the elimination or control of cross-connections – both actual and potential, and

3. Providing a continuing program of cross-connection control.

II. Authority

A. This program derives its authority from:

1. The Federal Safe Drinking Water Act of 1974, Title 22, MRSA 42(1), 42 (3), 2612 (2)

2. 10-144 MRSA Chapter 226 (State of Maine Cross-Connection Rules)

3. Maine State Internal Plumbing Code as administered by Maine Department of Professional and Financial Regulation 02-395 CMR 4

4. Authority arises from provisions in the Occupational Safety and Health Act

5. Rules and Regulations as published by the Baileyville Utilities District (District) and as approved by the Maine Public Utilities Commission

III. Scope

A. It is the intent of the District that all domestic water services, both new and existing, will be equipped to prevent potential backflow or backsiphonage through the "containment" approach, and that all devices successfully pass testing on a regular schedule to ensure system integrity. This requires the installation of and periodic testing of an approved backflow prevention device at the water meter by the owner at the owner's expense within 90 days following written notice from the District. Fixture isolation alone is not deemed an acceptable method of backflow prevention by the District within its distribution system. Installation of and continuing testing and proper functioning of a cross-connection prevention device is a condition of service with the District. Failure, refusal or inability on the part of the responsible party (e.g. building owner) to install said device(s) within 90 days shall constitute a ground for discontinuing water service to the premises until such device(s) have been properly installed.

Recognizing that many tenants assume responsibility for cross-connection prevention and act as the owner's representative, the property owner is ultimately responsible for compliance with the District's cross-connection control program.

Unless otherwise specified, the Maine State Internal Plumbing Code and the State of Maine Cross-Connection Rules are the minimum acceptable standards. The District may adopt more stringent requirements. The District recognizes that the containment approach protects only the water supply, and does not provide protection for personnel or fixtures(s) within the structure.

Fire suppression systems are addressed under the Section XI. "Miscellaneous" of this program.

IV. Definitions

A. Anti-Backflow Assembly: An anti-backflow device with gate valves directly before and after it

B. Anti-Backflow Device: A device or means to prevent backflow. For the purposes of this program, the term "backflow device" shall include the term "Anti-Backflow Assembly"

C. Approved Source: A source of water utilized by a public water system for distribution to the public for consumptive or other purposes and which is approved by the Maine Department of Health and Human Services (DHHS) for such use, following a required and/or approved treatment process

D. Backflow: The undesirable reversal of the flow of water or mixtures of water and other liquids, gases, or other substances into the distribution pipes of a public water supply from any source or sources other than the public water system's approved source

E. Backflow Preventer: An anti-backflow device such as:

1. Reduced Pressure Principle Type: An assembly that consists of two independently acting internal loaded, check valves, a differential pressure relief valve, four properly loaded test cocks and two isolation valves (often referred to as an RPZ).

2. Double Check Assembly: A device having two independently acting, approved check valves that are internally loaded with two resilient seated shut-off valves and test cocks for periodic testing.

3. Dual check valve: A device having two independently acting, approved check valves. Used primarily in residential and low hazard non-residential situations.

F. Back-Siphonage: Backflow resulting from negative or less than atmospheric pressures in the distribution pipes of a potable water supply.

G. Containment: The District's required method for protection from contamination by a facility with internal cross connections of a supplier's public water system. This method of backflow prevention requires a backflow preventer (containment device) at the water service entrance.

H. Contaminant: Any chemical, biological, or radiological substance or matter which is an impairment of the water quality of the water which creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids or waste.

I. Cross-connection: Any physical or potential connection, or structural arrangement between two otherwise separate systems, one of which contains potable water and the other which contains water of unknown or questionable safety and/or steam, chemicals, gases or other contaminants and/or pollutants, whereby there may be a flow of an unapproved water to the potable water supply.

J. Customer: A person, firm, corporation, or governmental division which has applied for and been granted service, and is responsible for payment of the service.

K. Department: State of Maine Department of Health and Human Services, Maine CDC, Division of Environmental Health, Drinking Water Program

L. District: Baileyville Utilities District

M. Domestic service: A line which supplies potable water for non-fire protection uses such as drinking, bathing, culinary, heating, and process water purposes

N. Fire service: A water line which supplies water for fire protection to a fire sprinkler or life safety system

O. High hazard: A contamination hazard, as defined in the Maine State Internal Plumbing Code at 02-395 CMR 4. If a backflow were to occur, the resulting effect on the water supply could cause illness or death if consumed by humans. The foreign substance (contaminant) may be toxic and/or harmful to humans either from a chemical, bacteriological, or radiological standpoint. The effects of the contaminants may result from a short or long-term exposure.

P. Industrial fluids: Shall mean any fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollutional or plumbing hazard if introduced into an approved water supply. This may include, but is not limited to: polluted or contaminated used waters; all types of process waters and "used waters" originating from public potable water system which may deteriorate in sanitary quality; chemicals in fluid form; plating acids and alkalies; circulated cooling waters connected to an open cooling tower and/or cooling waters that are chemically or biologically treated or stabilized with any substances; contaminated natural waters such as from wells, springs, streams, rivers, bays, harbors, seas, irrigation canals or systems, etc.; oils, gases, glycerin, paraffines, caustic and acid solutions and other liquid and gaseous fluids used in industrial or other processes or for firefighting purposes.

Q. Low hazard: A pollution hazard, as defined in the Maine State Internal Plumbing Code at 02-395 CMR 4. If a backflow were to occur, the resulting health significance would be limited to changes in aesthetic quality such as taste, odor or color. The foreign substance must be non-toxic and non-bacterial in nature with no significant health effect.

R. Owner: Any person, firm, corporation, or other entity who has legal title to, or license to operate or inhabit, a property upon which a cross-connection inspection is to be made or upon which a cross-connection is present.

S. Plumbing system: All potable water supply and distribution pipes, all plumbing fixtures and traps, all drainage and vent pipes, and all building drains, including their respective joints and connections, devices, receptacles and appurtenances within the property lines of the premises and shall include potable water piping, potable water treating or using equipment, and water heaters.

T. Pollutant: A foreign substance that impairs the quality of the water to a degree which does not create a hazard to the public health but which does adversely and unreasonably affect the aesthetic quality (taste, odor or color) of such water for domestic use.

U. Potable water: An approved water source, free from impurities present in any amount sufficient to cause disease or harmful physiological effects. An approved water source whose physical, bacteriological, chemical and radiological quality must conform to the requirements of the Maine State of Maine Rules Relating to Drinking Water at 10-144 CMR 231.

V. Residential hazard: Any connection that has the same level of hazard as a typical residential household. Public water suppliers can increase protection from residential cross connection hazards using anti-backflow devices at the discretion of the supplier.

W. Temporary meter set: a meter which is set for a limited amount of time (such as but not limited to the summer) for a specific purpose (such as a swimming pool, fountain, or fair)

X. Water service entrance: That point in the property's water system beyond the sanitary control of the District. This will normally be the outlet end of the meter and will always be before any unprotected branch.

V. Administration and Approval

A. As required by the State of Maine, the District will operate a cross-connection prevention program, including keeping necessary records, which fulfills the requirements of the Department's Cross-Connections Rules and which is approved by the Department. The District will review its program at its discretion, and modifications will be submitted to the Department for approval.

B. An employee of the District or its agent, having properly identified himself, will have free access at reasonable hours to all premises supplied with District water to conduct a cross-connection survey to determine backflow prevention needs and whether the needs have been met. Access to the property for a cross-connection survey is a condition of service with the District. The District will determine the appropriate means of backflow prevention based on its approved program, and the Owner will comply with the District's recommendations.

C. If the District determines at any time that an imminent threat to public health exists, service will be terminated immediately and without written warning.

D. The District is not responsible for any cross-connections beyond the water service entrance.

VI. Degree of Hazard

A. Definitions of low hazard, high hazard, and residential hazard are contained in Section IV above.

B. District's requirements include but are not limited to:

Setting	Hazard Description	Hazard Classification
Single family residential	Without home occupation	Residential
Home occupation	Beauty shop	High
Home occupation	Animal grooming	Low
Home occupation	Catering (primarily off-site)	Low
Home occupation	Photo dark room	High
Home occupation	Chemicals in use	High
Home occupation	Antifreeze in use	High
Apartment buildings	Up to and including 4 units	Residential
Apartment buildings	Five or more units	Low
Commercial food service		High
Dry cleaners		High
Fire suppression system	Depends on system components	Low/High
Flower shop	No greenhouse	Low
Garage	Performs repairs	High
Gas station	Depot type	Residential
Greenhouse		High
Hospitals/nursing homes		High
Medical/dental facilities		High
Mortuaries		High
Pool	Directly plumbed	High
Print shop	Chemicals in use	High
Solar collectors		High
Veterinary clinics/kennels		High
Wells and/or auxiliary water supplies (e.g. river, lake, pond, etc.)	Unless complete separation demonstrated to the District	High

VII. Approved Devices

A. All anti-backflow devices must be listed and labeled in the Maine State Internal Plumbing Code (table 6.2 at the time this program takes effect).

B. Any devices installed after July 1, 2012 must be NSF 61 certified for lead content.

VIII. Cross Connection Approvals

A. A cross-connection will not be allowed unless the District approves it as necessary. All cross-connections will be protected by backflow prevention devices, assemblies, and methods specified in the Maine State Internal Plumbing Code.

B. New installations: The District will determine the degree of hazard and the required backflow prevention based on on-site inspection, the cross-connection application, and/or other information provided.

C. Existing installations: The owner or a representative thereof will inform the District of any changes in hazard, and may request an inspection for hazard reclassification. Existing devices may continue in service unless the degree of hazard supersedes the effectiveness of the device, or poses an unreasonable risk to public health.

D. Review: Cross connections will be reviewed for re-approval at the discretion of the District. If no change in hazard has occurred, approval is automatically granted. If a change in hazard has occurred, a modification in cross-connection protection maybe required, including the revocation of the cross connection approval.

E. Information: The District may require copies of plan, drawings, reports, or specifications related to the service connection or cross-connection at the Owner's expense.

IX. Responsibilities – District or its Agent

A. Records and Reports - The District will:

1. Maintain a copy of its current approved Cross-Connection Prevention Program, and will make it available on request.

2. Maintain records of devices and required tests in accordance with the State of Maine Cross Connection Rules

3. Recognize backflow preventer testers who have successfully completed a training course recognized by New England Water Works Association, American Backflow Prevention Association or other accredited backflow tester training provider and who have maintained a current/active certification/license. The District reserves the right to observe testing as performed by any certified individual.

B. Periodic Inspections - The District will:

1. Determine the degree of hazard and the appropriate cross-connection prevention device required.

2. Base the requirement on the hazards observed during the inspection, the current use of the building, or other related information. A change to higher or lower hazard classification must be approved by the District, and may occur should new information be received or observed.

3. Perform needed inspections for actual or potential cross-connections during normal working hours. At its discretion, the District may perform the inspection – with costs borne by the owner – outside of normal business hours.

4. Provide notification of any necessary installation, correction or change; the time allowed for correction; and any additional responsibility such as required testing.

5. Allow a maximum of 30 calendar days from the initial written notification for correction

    a) Unless a good cause for a time extension can be demonstrated to the District's satisfaction (see Sec X.E.) or

    b) The safety of the system or public health are at risk

6. Inspect the installation when completed as required.

7. Reserve the right to perform periodic testing – at its cost – of any device in its system.

C. Periodic Testing - Recognizing that any backflow preventer can fail and any method of protection can be subverted, the District will:

1. Determine the testing intervals for each device.

2. Provide notification in advance of the testing deadline (see below).

3. Provide notification of failure to meet the testing deadline.

4. Inspect dual check devices at no charge following installation and when a water meter is changed.

5. Require a successful test for service lines typically active for more than 90 consecutive days.

    a) Once each calendar year

    b) Notification at least four months in advance

6. Require a successful test for service lines typically active less than 90 consecutive days

    a) Within 10 calendar days of service line activation

    b) Notification prior to or at the time of activation

7. Require tests more frequently – at the owner's expense – based on a history of test failure or on the degree of hazard.

8. Require repairs or replacement by deadline set by the District (typically 10 business days) at owner expense. Regarding backflow preventers which fail during testing, the District may require that repair parts be ordered within 24 hours and that shipment be by the fastest means possible. Furthermore, any extended delay (more than 10 business days) may require discontinuance of service or other means to ensure protection of the public water system. Certain high hazard situations which, in the District's determination pose a threat to public safety, will not be allowed to continue unprotected if the backflow preventer fails the test and cannot be immediately repaired. The District does not perform repairs on backflow preventers; the Owner is responsible for the provision of spare parts, repair tools, or replacement devices, and should have a supply on hand.

D. Disconnection for Non-Compliance:

1. The District will commence disconnection proceedings in the manner specified under Chapter 660 of the Maine Public Utilities Commission regulations.

E. Extensions - Time extensions may be granted in compliance with the following:

1. The extension will not result in unreasonable risk to public health within the period of the extension.

2. The extension does not exceed 30 calendar days.

3. Compliance with the regulations by the deadline is not possible due to compelling factors, NOT exclusively economic.

4. The extension is approved by the District's Superintendent, with an endorsement by the District's Board if Trustees' or the Department (DHHS) if deemed necessary.

5. The extension will be signed by both the District and the Owner on a form provided by the District. Failure of the Owner to sign the form will render the agreement void.

6. Failure to meet the terms of the agreement by the specified deadline will result in disconnection proceedings.

X. Responsibilities - Property Owner

A. The owner will, at his expense, comply with program requirements, including:

1. Providing access for inspection or testing

2. Allowing no unprotected cross-connections including bypass lines

3. Installing appropriate backflow prevention device in compliance with all District requirements. All backflow prevention devices shall be accessible for testing (if testable), maintenance, repair, and replacement. Clearances shall be as recommended by the manufacturer. Pit or vault installations are strongly discouraged and must have District approval before installation. **Backflow prevention devices having atmospheric vents shall not be installed in pits, vaults, or similar potentially submerged locations.**

4. Providing maintenance or replacement to ensure a successful backflow preventer test(s)

5. Providing testing by an accepted tester whose license is current at the time of the test(s)

6. Providing written test results to the District in a format acceptable to the District signifying the device is functioning properly

7. Providing information to the District if property use would require a change in cross-connection protection (new, existing, proposed, or modified)

XI. Miscellaneous

A. Fire sprinklers/strainers: The District recommend that strainers be installed on double-check and reduced pressure zone valves directly upstream of the device to prevent possible fouling of the device by both foreseen and unforeseen circumstances such as water main breaks, fires, flushing of mains, which may stir up debris within the water main.

XII. Cross-Connection Control Program Approval

Baileyville Utilities District (ME0090100)

PO Box 40

Baileyville, Maine 04694

Approved by the Baileyville Utilities District's Board of Trustees

Signed: _____ Date: _____

Signed: _____ Date: _____

Signed: _____ Date: _____

Signed: _____ Date: _____

Signed: _____ Date: _____

Approved by the State of Maine Department of Health and Human Services, Maine CDC, Division of Environmental Health, Drinking Water Program

By: _____

Title: _____

Date: _____

FREQUENTLY ASKED QUESTIONS

1) Where does the District's water come from?

The District's water is pumped from an underground aquifer 3 ½ miles north of town via 2 separate wells. Each well produces approximately 750 gallons per minute separately and 75 hp motors push the treated water to a 1,000,000 gallon reservoir located on Bailey Hill. The water is gravity fed throughout the town via 20.7 miles of ductile iron water mains of varying sizes.

2) How do I know if my water is safe to drink?

A copy of our annual Consumer Confidence Report is available on our website. All violations of the Maine State Drinking Water Programs Regulations will be listed in the CCR. The Baileyville Utilities District has an exemplary record of producing excellent potable water for many years.

3) How much does water cost the residents of Baileyville?

Most residential homes use a 5/8" water meter. The minimum quarterly charge is $92.69 for the first 10,000 gallons (1337 cubic feet) of water. There is 7.48 gallons in each cubic foot of water. Each gallon costs $.009. The water rates for the various sized meters is listed in the *Terms and Conditions* section of this web site.

4) When should I have the water meter replaced?

If you suspect the water meter is reading incorrectly or is leaking, please call the District and a representative will set a date and time to test or replace the meter in your home. If it is found to be inaccurate or if it is of brass material, the District will change the meter free of charge, usually the day of the testing.

5) Why am I required to pay for water caused by a leak in my house if I did not purposely use the water?

The water rates we have in place are designed to sustain our infrastructure based on metered consumption. The water lost due to a leak in a home still costs the District money to get it there regardless if it is not purposely used by the homeowner. If the water does not enter the sewer system, we may be able to adjust the sewer bill but the water usage must be paid by the homeowner. Please refer to the *Terms and Conditions* section for water bill abatement protocol. Contact the Baileyville Town office for sewer bill abatement.

6) If I am a seasonal resident or leaving on vacation, does it save money to have the water service turned off when I am not there?

That depends on how long you plan to have the water turned off. It costs $92.69 for 3 months to leave the water service on. It does not cost anything to have the water turned off but it does cost $43.00 to have water service restored during normal hours and $60.00 after normal

came from the plumbing within your home. Some solder used to weld copper pipes and some older type fixtures may contain lead as well. The District does not have any lead service lines in the distribution system.

13) Who is responsible for fixing a leaking water meter or water shutoff in my home?

The District will repair or replace any faulty water meter at no cost to the homeowner. All plumbing repairs such as broken pipes, leaking valves or joints leading up to and leaving the water meter within the home must be repaired at the home owners expense.

14) What if I fall behind on my water bill and can't pay the entire amount due all at once?

Representatives of the District understand that people go through difficult times occasionally and will do everything within their power to not interrupt your water service. However, you must make an attempt to set up an affordable payment plan with the District and continue to make payments on time as agreed to.