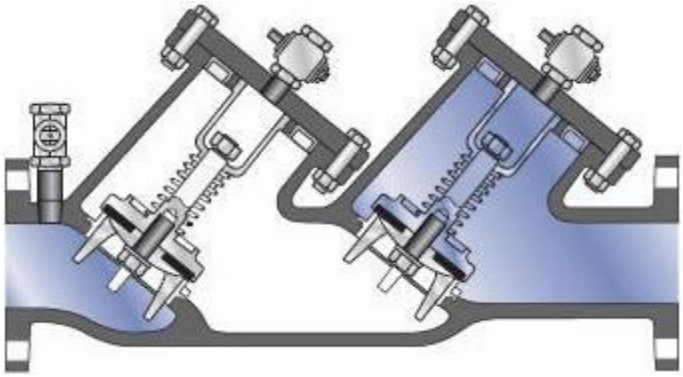
Creston Water System
Creston, Louisiana

Cross Connection Control Policy & Procedures Manual

Program Administration, Requirements and Implementation

DATE: June 2019



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Approval Date: _____

1.0 Authority

Sample Cross-Connection Control Program Policy or Ordinance For Small Systems

Introduction

This Policy addresses the State of Louisiana Sanitary Code (LAC Title 51: XII & Title 17:I) that states a public water system shall have no uncontrolled cross-connections to a pipe, fixture, or supply, any of which contain water not meeting provisions of the safe drinking water regulations.

A cross-connection is any point in a water distribution system where chemical, biological, or radiological contaminants may come into contact with potable water. During a backflow event, these contaminants can be drawn or pushed back into the potable water system. A backflow prevention device installed at every point of cross-connection prevents contaminated water from entering the potable water distribution system.

Any hazardous cross-connection discovered to be uncontrolled will be corrected or the water service will be shut off. The Louisiana Department of Health will be informed of the hazardous connection and the corrective action being taken.

Identification of Potential Cross-Connections

Per LAC Title 51: XII & Title 17:I, the **Creston Water System, Inc.** will performed a survey of the public water system through questionnaires and/or onsite inspections to identify potentially hazardous cross-connections, prioritized by degree of hazard. From the date of this adopted policy forward, any new water service installation will be inspected for compliance with these requirements for backflow prevention.

Public Education

The **Creston Water System, Inc.** will educate system users about the potential health risk that cross-connections pose, with an emphasis on cross-connections at or within homes and other residences.

Installation of Devices

The **Creston Water System, Inc.** will require system users to install and maintain backflow prevention devices on potentially hazardous service connections, as stated in LAC Title 51: XII & Title 17:I. All service connections within the water system must comply with LAC Title 51: XII & Title 17:I.

Each cross-connection may require a different type of backflow prevention device, commensurate with the degree of hazard posed by the cross-connection.

Annual Inspections

The State Plumbing Code requires that air gaps and backflow prevention devices be inspected or tested upon installation, repaired, when relocated, annually, or as required by the plumbing official or water supplier by a certified backflow prevention technician.

Record Keeping

Testing and maintenance records will be kept for five years.

All service agreements, questionnaires and the latest onsite premises surveys will be kept indefinitely.

Enforcement

To protect public health, water service will be discontinued after reasonable notice to the Customer if a violation of this Policy exists on the premises, and such other precautionary measures may be taken as are deemed necessary to eliminate any danger to the potable water supply. Water service will be discontinued if the proper backflow prevention assembly is not installed or not tested annually or not repaired when the assembly fails to meet state standards. Water service shall not be restored until the danger has been eliminated in compliance with this Policy. The **Creston Water System, Inc** retains the authority to immediately disconnect water service if necessary, to protect the public water supply.

Effective Date

This plan may be modified from time to time to meet the needs of the utility and to meet the State of Louisiana requirements. The policy will be reviewed by the water system periodically to determine if the existing plan meets state requirements set forth by the Louisiana Department of Health and that it promotes an effective ongoing Cross-connection Control program.

This policy shall take effect on this _____ day of _____, 20___.

_____	_____
Appointing Authority/Board President/Chairman	Date
_____	_____
Councilman/Alderman/Board Member	Date
_____	_____
Councilman/Alderman/Board Member	Date
_____	_____
Councilman/Alderman/Board Member	Date
_____	_____
Water System Manager	Date

1.2 LAC 51 – Sanitary Code Part XII Water Supplies Chapter 3

~~may transport the recipient to a more distant facility if the individual provider will accept reimbursement from the department to the nearest facility and assumes responsibility for additional expenses incurred.~~

~~AUTHORITY NOTE: Promulgated in accordance with R.S. 36:254 and Title XIX of the Social Security Act.~~

~~HISTORICAL NOTE: Promulgated by the Department of Health, Bureau of Health Services Financing, LR 42:1003 (July 2016).~~

~~§573. Non-Emergency, Non-Ambulance Transportation~~

~~A. - F.5. ...~~

~~G. Effective for dates of service on or after October 1, 2014, the monthly payment of capitated rates shall be replaced with a per trip payment methodology.~~

~~1. Payments previously made using the monthly capitated rate shall be made by dividing the monthly rate by the number of authorized trips within a given month. Each trip will then be reimbursed separately.~~

~~AUTHORITY NOTE: Promulgated in accordance with R.S. 36:254 and Title XIX of the Social Security Act.~~

~~HISTORICAL NOTE: Promulgated by the Department of Health and Hospitals, Office of the Secretary, Bureau of Health Services Financing, LR 33:462 (March 2007), LR 34:878 (May 2008), amended by the Department of Health, Bureau of Health Services Financing, LR 36:2564 (November 2010), LR 37:3030 (October 2011), amended LR 38:3214 (December 2012), amended by the Department of Health, Bureau of Health Services Financing, LR 42:1004 (July 2016).~~

~~Rebekah E. Gee MD, MPH~~
~~Secretary~~

~~1607#054~~

RULE

Department of Health
Office of Public Health

Backflow and Cross Connection Control in Water Supplies
(LAC 51:XII.344 and 346)

Under the authority of R.S. 40:4 and 40:5 and in accordance with R.S. 49:950 et seq., the Administrative Procedure Act, the state health officer, acting through the Department of Health, Office of Public Health (LDH-OPH), has amended Part XII (Water Supplies) of the Louisiana state *Sanitary Code* (LAC 51). The amendments are necessary to ensure that public water supplies continue to protect their water systems from backflow and cross connections which may occur on customer premises and which can cause contamination of the water supply.

As required by Act 836 of the 2014 Regular Legislative Session, Part XIV (Louisiana state Plumbing Code) of the Louisiana state *Sanitary Code* (LAC 51, *Public Health—Sanitary Code*) became null and void on January 1, 2016. In accordance with the Act, the Louisiana state Uniform Construction Code Council (LSUCCC) promulgated new state plumbing regulations through emergency rules under the state *Uniform Construction Code* (LAC 17:I). Before January 1, 2016, comprehensive backflow protection/cross connection control regulations designed to protect public health applicable to plumbing were contained in Part XIV (Plumbing) of the state *Sanitary Code*. Effective January 1, 2016, some of these same backflow protection/cross connection control regulations applicable to plumbing have been adopted by the LSUCCC under the state *Uniform Construction Code*, particularly within the 2012 *International Plumbing Code* and within the 2012 *International Residential Code* (see December 20, 2015 *Louisiana Register*, Volume 41, page 2545 and June 2016 *Louisiana Register*, Volume 42, page 826).

The state health officer, through LDH-OPH, has promulgated a Rule that finalizes the requirements of an Emergency Rule (the "ER") concerning cross connection control/protection of the water supply which became effective on February 23, 2016. This Rule maintains the requirements of the ER which amended Part XII (Water Supplies) of Title 51 (*Public Health—Sanitary Code*) in order to direct public water systems to utilize the backflow and cross connection control regulations contained in the state *Uniform Construction Code*. Prior to the adoption of these ERs, Part XII was outdated because it directed water suppliers to Part XIV of the state *Sanitary Code* relative to protecting its system from backflow and cross connections on customer premises. As mentioned above, plumbing regulations formerly contained under Part XIV of the state *Sanitary Code* have been repealed effective January 1, 2016.

In addition, these ERs adopted comprehensive qualification requirements for persons involved in installing, repairing, testing, and maintaining backflow prevention devices and methods. This Rule keeps those requirements in place to ensure that all persons involved in the installation, repair, testing and maintenance of backflow prevention devices are qualified to perform such work.

For these reasons, Part XII (Water Supplies) of the Louisiana state *Sanitary Code* (LAC 51:XII) is amended as follows.

Title 51
PUBLIC HEALTH—SANITARY CODE
Part XII. Water Supplies
Chapter 3. Water Quality Standards

§344. Protection of Water Supply/Containment Practices

A. As used in this Section, "mandatory containment practices" means the containment practices prescribed in and required by the state *Uniform Construction Code*, LAC 17:I, including maintenance and testing requirements, and any additional or related requirements of this Part.

B. In order to protect its water supply from potential contamination, each water supplier shall develop and implement a written backflow prevention plan outlining the policies and procedures it will use to verify that its customers comply with mandatory containment practices, and shall make a reasonable effort to ensure that only customers who comply with mandatory containment practices connect or remain connected to its water supply.

C. Unless otherwise directed by the state health officer, a water supplier shall disconnect or refuse to connect customers who:

1. fail to comply with mandatory containment practices; or

2. fail to provide or allow adequate confirmation of such compliance.

D. If a water supplier has a reasonable basis to believe that an unprotected or improperly protected cross connection

exists on the premise of any customer not required to comply with mandatory containment practices, the water supplier shall take reasonable steps to perform one or more of the following:

1. confirm that the cross connection on the premise is eliminated or does not exist;

2. confirm that approved fixture isolation backflow protection is installed at the cross connection on the premise in accordance with the fixture isolation practices prescribed in and required by the state *Uniform Construction Code* (LAC 17:I);

3. confirm that approved containment backflow protection is installed; or

4. discontinue water service to the customer.

E. When deemed necessary to protect public health, the state health officer may issue an administrative order or emergency order requiring a water supplier to comply with this Section.

AUTHORITY NOTE: Promulgated in accordance with the provisions of R.S. 40:4(A)(8) and 40:5(A)(2)(3)(5)(6)(17)(20).

HISTORICAL NOTE: Promulgated by the Department of Health and Hospitals, Office of Public Health, LR 38:2795 (November 2012), amended by the Department of Health, Office of Public Health, LR 42:1094 (July 2016).

§346. Installer, Repairer, Tester and Maintainer Qualifications for Backflow Prevention Devices and Methods

A. Installer/Repairer/Maintainer Qualifications. Backflow preventers shall be installed, repaired and/or maintained by a state Plumbing Board of Louisiana (SPBLA) -licensed plumber who holds an SPBLA water supply protection specialist endorsement on his/her plumbing license pursuant to R.S. 37:1361 et seq., and its implementing regulations (LAC 46:LV.101 et seq.). Backflow preventers associated with a landscape irrigation system may be installed, repaired and/or maintained by a Horticulture Commission of Louisiana-licensed landscape irrigation contractor who holds an SPBLA-issued special water supply protection specialist endorsement in accordance with R.S. 3:3808(P). Backflow preventers located on public property or otherwise under the complete control of the water supplier (for example, water meter and the piping upstream of the water meter, if provided), may be installed, repaired and/or maintained by a backflow prevention assembly repairer who meets the ASSE 5130-2009 (backflow prevention assembly repairer professional qualification standard) or other individuals holding a backflow prevention assembly repairer certificate from a nationally recognized backflow certification organization approved by the state health officer.

B. Field Tester Qualifications. Backflow preventers shall be tested by a state Plumbing Board of Louisiana (SPBLA) -licensed plumber who holds an SPBLA water supply protection specialist endorsement on his/her plumbing license pursuant to R.S. 37:1361 et seq., and its implementing regulations (LAC 46:LV.101 et seq.); or, by a backflow prevention assembly tester who meets ASSE 5110-2009 (backflow prevention assembly tester professional qualification standard), or other individuals holding a testing certificate from a nationally recognized backflow certification organization approved by the state health officer. Backflow preventers associated with a landscape irrigation system may be tested by a Horticulture Commission of Louisiana-licensed landscape irrigation contractor who holds an SPBLA-issued special water supply protection specialist endorsement in accordance with R.S. 3:3808(P).

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:4(A)(8) and R.S. 40:5(A)(2)(3)(5)(6)(17)(20).

HISTORICAL NOTE: Promulgated by the Department of Health, Office of Public Health, LR 42:1095 (July 2016).

Rebekah E. Gee MD, MPH
Secretary

1607#035

~~**RULE**~~

~~**Department of Insurance**~~
~~**Office of the Commissioner**~~

~~Regulation 32—Group and Individual Coordination of Benefits (LAC 37:XIII.Chapter 3)~~

~~The Department of Insurance, pursuant to the authority of the *Louisiana Insurance Code*, R.S. 22:1 et seq., and in accordance with the Administrative Procedure Act., R.S. 49:950 et seq., hereby gives notice of its intent to amend and promulgate Regulation 32—Group Coordination of Benefits. The purpose of the regulation is to establish a uniform order of benefit determinations.~~

~~The purpose for amending Regulation 32 is for the Department of Insurance to adopt the National Association of Insurance Commissioners' Model regulation entitled "Coordination of Benefits Model Regulation".~~

~~**Title 37**~~
~~**INSURANCE**~~
~~**Part XIII. Regulations**~~

~~**Chapter 3. Regulation 32—Group Coordination of Benefits**~~

~~**§301. Purpose and Applicability**~~

~~A. The purpose of this regulation is to:~~

~~1. establish a uniform order of benefit determination under which plans pay claims;~~

~~2. reduce duplication of benefits by permitting a reduction of the benefits to be paid by plans that, pursuant to rules established by this regulation, do not have to pay their benefits first; and~~

~~3. provide greater efficiency in the processing of claims when a person is covered under more than one plan.~~

~~B. This regulation applies to all plans which includes all accident and health products and health maintenance organization products that are issued on or after the effective date of this regulation, which is [insert date].~~

~~AUTHORITY NOTE: Promulgated in accordance with R.S. 22:3.~~

~~HISTORICAL NOTE: Promulgated by the Department of Insurance, Office of the Commissioner, LR 17:67 (January 1991), amended LR 20:52 (January 1994), LR 23:415 (April 1997), LR 41:1095 (July 2016).~~

~~**§303. Definitions**~~

~~A. As used in this regulation, these words and terms have the following meanings, unless the context clearly indicates otherwise.~~

~~*Allowable Expense*—except as set forth below or where a statute requires a different definition, means any health care expense, including coinsurance or copayments and~~

1.3 International Plumbing Code Adoption

DEPARTMENT OF HEALTH
AND HOSPITALS
Public Health

Louisiana HB 1048/ACT 836 Fact Sheet

Louisiana House Bill 1048 was signed by the Governor on June 23rd, 2014 and enacted as Act Number 836 of 2014. With an effective date of January 1st, 2016, this Act repeals the authority of the State Health Officer, acting through the Office of Public Health (OPH) of the Department of Health and Hospitals (DHH), to prepare and promulgate plumbing rules and regulations.

In accordance with the Act, the Louisiana State Plumbing Code [Part XIV (Plumbing) of Title 51 (State Sanitary Code) of the Louisiana Administrative Code (LAC)] will be null, void, and unenforceable on and after January 1, 2016. As required, the Louisiana State Uniform Construction Code Council (LSUCCC) will promulgate State plumbing regulations through the evaluation, adoption, and amendment of the following codes as part of the State Uniform Construction Code:

- The 2012 International Building Code, Chapter 29-Plumbing Systems;
- The 2012 International Residential Code, Part VII-Plumbing; and,
- The 2012 International Plumbing Code.

Applicable plumbing provisions of these codes, along with state amendments thereto adopted by the LSUCCC, will become effective January 1, 2016. The International Codes can be assessed at: http://publicecodes.cyberregs.com/icod/index.htm
Louisiana amendments were published as an Emergency Rule in the December 2015 Issue of the Louisiana Register. These amendments can be accessed at: http://www.doa.la.gov/osr/EMR/1512EMR082.pdf

Beginning on January 1st, 2016, all plumbing systems will be required to be designed in accordance with the provisions of these codes, as amended by the LSUCCC. This includes new construction, reconstruction, and the extensive alterations or repair of buildings and other structures. In accordance with the Act, DHH will no longer have enforcement authority over the new plumbing provisions that will become part of the State Uniform Construction Code. Enforcement of such will be handled in accordance with LA R.S. 40:1730.21 which requires all local municipalities and parishes in the State to enforce the State Uniform Construction Code. This includes plan review, conducting of inspections, and the issuance, denial, or revocation of permits.

In addition, the new law amends the Louisiana Building Code (which governs the design of state-owned buildings) by removing compliance with Part XIV (Plumbing) of the State Sanitary Code and replaces it with the above referenced codes, as amended by the LSUCCC. Beginning on January 1st, 2016, the Office of Facility Planning and Control of the Division of Administration will be responsible for ensuring that state-owned buildings comply with these newly adopted plumbing regulations.

For any questions regarding these changes, please contact the Louisiana State Uniform Construction Code Council or DHH/OPH—Engineering Services at:

LA State Uniform Construction Code Council:
Address: 8181 Independence Blvd.,
Baton Rouge, LA 70806
Phone: 225-922-0817
Fax: 225-922-2065
Web: http://lsuccc.dps.louisiana.gov/index.html

DHH/OPH – Engineering Services:
Address: 628 N. 4th Street,
Baton Rouge, LA 70802
Phone: 225-342-7499
Fax: 225-342-7303
Web: www.dhh.la.gov/index.cfm/page/549/n/281

1.4 Code Reference Guide

2012 International Plumbing Code / 2012 International Residential Code (as amended) Backflow/Cross-Connection Control Requirements				
Backflow/CCC Provision	IPC Provisions/Amendments		IRC Provisions/Amendments	
	IPC Location [Section Number(s)]	IPC Amendment Location [LAC 17:I]	IRC Location [Section Number(s)]	IRC Amendment Location [LAC 17:I]
Testing & Owner Responsibilities	312.10.1 - 312.10.3	§111.C.7, §111.C.8, §111.C.9 (new section)	P2902.8.1 – P2908.8.3	§107.A.8.i – §107.A.8.k: §107.A.8.l: (new section)
Location of Backflow Preventers	608.14	§111.F.23	P2902.6	§107.A.8.g
Freeze Protection of Backflow Preventers	608.14.1 - 608.14.2	§111.F.24	P2902.6.1 – P2902.6.2	§107.A.8.h
Thermal Expansion Control	607.3.2	§111.F.18	P2903.4.1 – P2903.4.2	§107.A.8.m
Standards and Application of Backflow Preventers	608.1, Table 608.1, 608.13	§111.F.19	P2902.3 – P2902.3.6, Table P2902.3,	§107.A.8.a & §107.A.8.b
-Air Gaps (AG)	Table 608.1, 608.13.1, 608.15.1, Table 608.15.1	No amendments made to these Sections/Table	Table P2902.3, P2902.3.1, Table P2902.3.1	No amendments made to these Sections/Table
-Reduced Pressure Principle Assembly (RP)	Table 608.1, 608.13.2	No amendments made to these Sections/Table	Table P2902.3, P2902.3.5	No amendments made to these Sections/Table
-Double Check Valve Assembly (DC)	Table 608.1, 608.13.7	No amendments made to these Sections/Table	Table P2902.3, P2902.3.6	No amendments made to these Sections/Table
-Atmosphieric Vacuum Breaker Assembly (AVB)	Table 608.1, 608.13.6, 608.15.4	§111.F.25	Table P2902.3, P2902.3.2	§107.A.8.a
-Pressure Vacuum Breaker (PVB)	Table 608.1, 608.13.5, 608.13.8, 608.15.4	§111.F.25	Table P2902.3, P2902.3.4	§107.A.8.b
-Dual Check Valves	Table 608.1, 605.3.1 (new section), 608.6	§111.F.11 (new section), §111.F.21	Table P2902.3	No amendment made to this Section
Fixture Isolation Requirements	608.2, 608.3, 608.16 – 608.16.27	§111.F.27 – §111.F.29; §111.F.30 – §111.F.46 (new sections)	P2902.2, P2902.4, P2902.5	§107.A.8.c, §107.A.8.d; §107.A.8.e & §107.A.8.f (new sections)
Containment Practices	608.18, 608.18.1, Table 608.18.1, 608.18.2 (new sections)	§111.F.49 – §111.F.52 (new sections)	NA	NA
Access Prohibited	608.16.27 (new section)	§111.F.46 (new section)	NA	NA
Hospital Fixtures	608.3.1	No amendment made to this Section	NA	NA
Individual/Private Water Wells	608.6.1, 608.17	§111.F.47	P2902.1	No amendment made to this Section
Freeze-Proof Hydrants	608.7	No amendment made to this Section	NA	NA

2.0 Administrative Procedures

2.1 Implementation Timeline

Task	Date of Completion	Comments
Established legal authority to implement a program.		
Assess purveyor's water system for cross-connections.		
Install backflow preventer on purveyor's system		
Conduct hazard assessment for new customers (questionnaire/survey)	Upon application for new service	
Conduct hazard assessment when building modifications are made requiring a building or plumbing permit	Upon permit	
Ensure backflow preventers are installed for new customers	Before service is provided	
Mailed questionnaire/survey to all commercial and residential customers (Initial Hazard Survey of System)		
Conduct hazard assessments for existing high hazard customers & notify existing high hazard customers of hazard assessment results and backflow preventer installation requirements.		
Ensure backflow preventers are installed for existing high hazard customers		
Re-assess all backflow preventers and inspect Air Gaps	Annually	

2.2 Staff Assignment

Title	Assignments
Mayor-Manager-Board President or Designee	Manage program, answer questions from public, initiate action to eliminate cross-connections
Clerk/Office Staff	Process paper work related to CCC/BFP program (survey records, correspondence, etc.), answer general questions from public
Operator/Field Staff	Be aware of and report uncontrolled cross-connections found in distribution system.

2.3 Standard Operating Procedures

a. Records

Record keeping includes the maintenance of paper files and computer documentation of each account. Paper files will be filed in water customer account number order.

Paper files will be created for each water customer account and will include the following information:

- Original Initial Questionnaire/Survey and subsequent field survey forms
- Copies of each letter sent to the customer requesting and annual test or new installation.
- Notes regarding phone conversations, copies of additional correspondence or other items as deemed appropriate.
- Backflow Test reports and Alarm Check Valve Tear Down and Fire Riser Flow Inspection forms documenting annual compliance.

Records will be created for each water customer with a backflow prevention device or assembly, and will include the following information:

- Water customer account numbers
- Property owner information
- Facility information
- Existing backflow assembly information or identifiers for backflow assemblies being requested to be installed
    - backflow assembly identification number and description;

  - location of backflow assembly;
  - installation date of backflow assembly, and all information regarding surveys;
  - date of tests to verify that the backflow assembly is functioning properly;
  - description of repairs and recommendations for repairs made by tester;
- Annual test due dates
- On-site assembly location
- Survey dates
- Degree of Hazard
- Backflow testing results for each year
- Backflow tester information

Other records to maintain:

- Active and inactive letters requesting annual testing and/or installation requirements
- Tester certification letters and test kit compliance letters
  - the tester's name and certificate number;
  - a record of each backflow assembly tester certification renewal date;
  - a current, (annual) record of each certified tester's successful testing gauge calibration results
- Updated lists of approved backflow assemblies, certified testers, hazard codes and all other detailed items as necessary to accurately document the status of each account.
- A history of activities for each account in terms of letter generation and response to recommendations for each account.

b. Compliance and Enforcement

Water service may be discontinued in the case of non-compliance with this policy. Non-compliance includes, but is not limited to, the following:

1. Refusal to allow the Water Supplier access to the property to inspect for cross connections
2. Removal of a backflow prevention assembly or required method of protection
3. Bypassing of a backflow prevention assembly or required method of protection
4. Providing inadequate backflow prevention when potential or actual cross connections exist

5. Failure to install a backflow prevention assembly or required method of protection
6. Failure to test and/or properly repair a backflow prevention assembly or required method of protection
7. The degree of hazard warrants the immediate disconnection of services.
8. Failure to comply with the requirements of this policy or state plumbing code.

All correspondence with customers will be completed in writing with the finale notice of non-compliance resulting in service interruption by certified mail. Sample letters developed include the following compliance and enforcement requirements:

1. First notice letters are sent out _____60_____ days prior to certified backflow test being due and water being shut off. (A response time of _____60_____ days is noted on the letter)

2. If the passing test reports are not received after _____30_____ days, a reminder notice letter is sent prior to water being shut off. (A response time of _____30_____ days is noted on the letter)

3. If the passing test reports are not received after _____45_____ days, a final reminder notice letter is sent out prior to the water being shut off. (A response time of _____15____days is noted on the letter)

4. If the passing test reports are not received by the compliance date, water service will be shut off on the following working day.

5. Water service will remain shut off until a passing certified backflow test is received, or modification of plumbing performed under the observance of a water supplier representative.

6. Other letters:
   - Request to complete Questionnaire
   - Request to Submit Test Report
   - Second Notice to Submit Test Report
   - Request to Install Backflow Prevention Device
   - Questionnaire/Water Use Survey Form

c. Public Education

Brochures explaining cross-connections and backflow will be distributed to customers every few years.

d. Bulk Water Sales

<Water System to choose a policy from below or create their own>

The **Creston Water System, Inc.** does **NOT** allow bulk water sales.

Or

There are 3 general requirements for a fire hydrant/construction meter backflow protection:

1. All temporary and/or hydrant meters issued by the water system for construction usage require either an approved Air Gap or a Reduced Pressure Principal Assembly backflow protection to be installed at an approved location behind the meter at the time that the temporary water meter is installed.
2. If the approved Air Gap option is chosen, the customer must get an approval for the actual Air Gap to be utilized prior to the first usage of the meter. If the Reduced Pressure assembly option is chosen, the RP must be successfully tested prior to the first usage of the meter for construction purposes, and a copy of the test report forwarded promptly to the water system.
3. Thereafter, whenever the water meter is relocated, or on each yearly anniversary of the first installation of the meter that the meter is still in place, the Air Gap must be re-inspected by the water system, or else the backflow assembly must be successfully retested and a copy of the test report must be promptly forwarded to the water system, depending on the option chosen by the Contractor.

Please note: The customer is responsible for providing and maintaining the Air Gap or RP, whichever option is chosen.

e. Residential Dual Check

It is the policy of **Creston Water System, Inc.** to install a dual check valve on the customer side of the meter as an extra level of backflow protection for low hazard residential services in accordance with the 2012 International Plumbing Code (amended)Backflow/Cross-Connection Control Requirements:

> **605.3.1 Dual check-valve-type backflow preventer.**
> Dual check-valve backflow preventers installed on the water supply system shall comply with ASSE 1024 or CSA B64.6. These devices, which are commonly installed immediately downstream of water meters by water suppliers, are not approved backflow prevention devices and are only allowed to be installed when no cross connections exist downstream of the device or when all downstream cross connections are properly protected by approved backflow prevention devices, assemblies, or methods in accordance with Section 608 of this code.

f. Auxiliary Water Supplies

Auxiliary water supply means, when applied to premises, any water supply on or available to the premises other than the primary potable water supply for the premises. This includes, but is not limited to:

- Lake, pond, creek, bayou or river water (any surface water)
- Private water well on premise
- Reclaimed water
- Water from neighboring public water supply
- Onsite Water Reuse Systems (rainwater, stormwater, condensate water, graywater, or other non-sewage originated water)

These waters may be contaminated or polluted, or they may be objectionable and constitute an unacceptable water source over which the public water supply system does not have sanitary control. Auxiliary water supplies are considered **high hazard**.

> **IPC 2015 – Section 608.6.1 Private water supplies.**
> Cross connections between a private water supply and a potable public supply shall be prohibited.
>
> **IRC 2015 - Section P2902 Protection of Potable Water Supply**
> **P2902.1 General**
> A potable water supply system shall be designed and installed as to prevent contamination from nonpotable liquids, solids or gases being introduced into the potable water supply. Connections shall not be made to a potable water supply in a manner that could contaminate the water supply or provide a cross-connection between the supply and a source of contamination except where *approved* backflow prevention assemblies, backflow prevention devices or other means or methods

are installed to protect the potable water supply. Cross-connections between an individual water supply and a potable public water supply shall be prohibited.

LAC 51:XII.343. Cross Connections (Sanitary Code Part XII – Water Supplies)

A. There shall be no physical connection between a public water supply and any other water supply which is not of equal sanitary quality and under an equal degree of official supervision; and there shall be no connection or arrangement by which unsafe water, hazardous fluid or contamination may enter a public water supply system.

B. Water from any potable water supply complying with these requirements may be supplied to any other system containing water of questionable quality only by means of an independent line discharging not less than a distance equal to two times the pipe diameter or 2 inches, whichever is greater, above the overflow level of storage units open to atmospheric pressure or by other methods approved by the state health officer.

Any Customer having a private well, auxiliary water supply or other private water source will be required to disconnect from the auxiliary water supply. Permission to cross-connect will be denied by the Public Water Supply system.

3.0 Risk Assessments

All original assessments (Water Use Questionnaire/Survey's) are kept on file.

4.0 Inventory

Device Location	Contact Person & Address if not at device location	Phone	Device Location on property	Type of Device; Make, Model	Serial No.	Date of Test	Tester Name & Lic. No.
Kwik Car Wash - 200 Hwy 49, Anytown, LA	John Doe	337-555-9517	mechanical room	Watts - RPZ	#12345	10/9/2011	ABC Plumbing Lic. 1234
Joe Blow - 125 Hopping Brook Road, Anytown, LA	Jane Doe	318-555-2800	left front yard, at meter	Febco - DCVA, RPZ or PVB	#Feb6789	12/22/2011	Linda Smith LMP#5X55
Country Farms			Animal Water Trough	Air Gap		1-30-2018	Water System Operator – Lic #2005
1st Baptist Church	Pastor		Baptismal	Air Gap		1-30-2018	Water System Operator – Lic #2005

5.0 Test Reports

All test reports are kept for five (5) years and then scanned into the system.

5.1 Device Reports

5.2 Air Gap Reports

6.0 Certified Testers List

A current list of Certified Testers can be found at the following websites:

State Plumbing Board of Louisiana: www.spbla.com
Louisiana LDH/OPH: http://dhh.louisiana.gov/index.cfm/page/549/n/281
ASSE-International: http://asse-plumbing.org/bpatcertlist.asp
Louisiana Rural Water Association: https://lrwa.org/

Lists are compiled from the information obtained from the above websites for

7.0 Emergency Response Plan

When system personnel are first notified of a backflow incident, they should determine whether the cross-connection still exists. If so, staff members should begin at step 1 below. If the cross-connection has been eliminated, begin at step 3. **(Please note LDH-OPH should be notified as soon as possible. LDH-OPH will most likely take control of the system and determine the plan of action. See step 5 for emergency contacts.)**

In the event of a backflow incident, the public water system personnel should:

1. **Prevent Further Contamination**
   Stop the pressure differential that caused backflow of the contaminant, if possible. For example, if the differential is the result of low pressure in the distribution system, check the status of the service pumps.

2. **Identify and isolate the Cross-connection**
   For example, if the cross-connection is due to back-siphonage of chemicals through a garden hose left hanging into a chemical tank, disconnect the garden hose at the residence to create an air gap between the potable-water supply and the chemicals.

3. **Document the Contaminant**
   Document the reported contaminant. If the contaminant is unknown, skip to step 8 (sampling) in order to determine the type of public health hazard threat posed by the contaminant. Then return to step 4

4. **Notify the Public**
   In areas where human exposure to harmful contaminants is suspected, immediately notify affected consumers of restricted water usage and recommend that they do not drink the water. The public notice should explain the cause of the contamination and corrective actions that are under way and should discuss health effects as appropriate.

   The type of public notice depends on the type of contaminant. Issue a "boil water" advisory if the contaminants are biological, and if boiling does not create other health problems through inhalation or skin contact with vapor. Issue a "do not drink" notice if the contaminants are chemical, and if vapor and skin contact do not pose risks. A "do not use" notice should be issued if the contaminant is unknown, treatment of the water is not possible, or the contaminant poses a health risk through inhalation of water vapor or skin contact with vapor. Because "do not use" and "do not drink" notices place a great burden on critical facilities, such as hospitals, alternate water sources must be secured immediately.

5. Notify the Department of Health (LDH)

Engineering Service Main Line	225-342-7499 225-342-8355 Fax: 225-342-7303
District Engineer	
Regional Office	
_____ Parish	

6. Notify Additional Authorities

If Emergency Dial 911

Organization	Contact Person	Contact Phone
_____Parish Fire Dept.		
School Board		
Sheriff/Police		
Police Jury		
_____ Parish OEP/ Homeland Security		
Louisiana Rural Water Association		800-256-2591 Email: LaRWA@centurytel.net Website: www.lrwa.org

7. Isolate the Contamination

If the contaminated portion of the distribution system can be easily isolated, proceed to step 11. It the contamination is extensive, and its extent is unknown, proceed to step 8.

8. Sample the Water to Determine the Type and Extent of Contamination

Sample the water to determine the level of the reported contaminant. If your knowledge of the backflow incident is based on a customer complaint but the specific contaminant is unknown, take samples of the water appropriate to the taste, odor, or appearance noted in the complaint. For example, if a customer complains of a gasoline odor in the water, perform a test for volatile organic compounds.

Always take bacteriological samples if the specific contaminant is unknown. If personnel from the public water system are unable to collect and send samples for analysis, the LDH staff should be notified.

Throughout the incident, continue to take appropriate samples within and outside of the suspected contaminated area to assess the extent of the contamination.

9. Make a Plan for Systematic Flushing

Develop a plan for thorough cleaning or flushing of the system to minimize the risk of drawing contaminants into uncontaminated areas. The plan should indicate the amount of water and the length of time needed to completely flush the system. The direction of flow should follow the principles of unidirectional flushing, ensuring that clean water is drawn through the contaminated site and contaminated water is prevented from entering uncontaminated areas. Depending on the nature of the contamination, some wastes may be discharged into the sanitary sewer and some may need special handling or treatment. Inform the water customers of the remediation plans and whether they will need to flush their plumbing, including water heaters, ice makers, and other appliances.

10. Isolate the Contamination and Flush

Isolate the contaminated portion of the distribution system and flush the system and, where necessary, clean the customer's private water distribution facilities.

11. Sample after Flushing

After flushing and any necessary cleaning, test the drinking water in affected areas to ensure the contamination has been removed. The type of samples that should be collected depends on the type of contamination that has been identified.

12. Eliminate Risk of Future Contamination

Ensure that the source of contamination has been removed and that the risk of future contamination has been eliminated. If the backflow incident occurred at a residence or business (the customer side of the meter), perform a customer-service inspection at that location. If possible, develop a plan to lower the risk of this type of cross-connection recurring in the future. The plan should include contacting similar types of businesses with preventive guidance.

13. Restore Consumer Confidence in Water Quality

Inform the public when the water is clean and safe to drink. Lift the public-health notice restricting water usage in the same manner it was issued.

7.1 Backflow Incident Report Form

Date of Incident: _____ Time of Occurrence: _____

General Location (Street, etc.): _____

Reporting By: _____ Report Date: _____

Address: _____City/State/Zip:_____

Phone: _____ Alternate Phone: _____

Backflow Originated From:

Name of Premises: _____

Street Address: _____ City: _____

Contact Person: _____

Phone: _____ Alternate Phone: _____

Type of Business: _____

Description of Contaminants: (Attach Chemical Analysis or MSDS if available)

_____

_____

Distribution of Contaminants:

Contained within customer's premises: Yes _____ No_____

Number of persons affected: _____

Effect of Contamination:

Illness Reported: _____

Physical irritation reported: _____

_____

Cross-Connection Source of Contaminant (boiler, chemical pump, irrigation system, etc.):

Cause of Backflow (main break, fire flow, etc.):

Corrective Action Taken to Restore Water Quality (main flushing, disinfection, etc.):

Corrective Action Ordered to Eliminate or Protect from Cross Connection (type of backflow preventer, location, etc.)

Previous Cross-Connection Survey of Premises:

Date: _____ By: _____

Type of Backflow Preventer Isolating Premises:

_____

Date of Latest Test of Assembly: _____

Notification of Louisiana LDH-OPH

Date: _____ Time: _____

Person Notified: _____

Attach sheets with additional information, sketches, and/or media information.