

4460 Decatur Dr. Ferndale, WA 98248 Phone:360 384-3921 Fax: 360 384-3246 www.oursandypoint.com

SANDY POINT IMPROVEMENT COMPANY CROSS CONNECTION CONTROL PROGRAM

Revised: October 2017 Adopted: May 22, 2018

Table of Contents

REQU	JIREMENTS FOR THE PROGRAM	2
PROG	GRAM OBJECTIVES	3
DE	MMARY OF PROGRAM DECISIONSCISION SUMMARY TABLE FOR THE SANDY POINT IMPROVEMENT COMPANY	4
ELEM	ΛΕΝΤ 1: AUTHORIZING OF A CCC PROGRAM	5
ELEMI	IENT 2: EVALUATING THE DEGREE OF HAZARD	5
CRC	OSS-CONNECTION HAZARD SURVEYS	ε
ELEMI	IENT 3: ELIMINATION OR CONTROL OF CROSS-CONNECTIONS	8
	CKFLOW PREVENTER REQUIREMENTS	
ELEMI	IENT 4: QUALIFIED PERSONNEL	10
	OGRAM ADMINISTRATION	
ELEMI	IENT 5: INSPECTION AND TESTING	
1. 2.	Frequency of Inspection and Testing	12
3. 4.		
5. 6.	NOTIFICATION OF INSPECTION AND/OR TESTING	12
ELEMI	IENT 6: TESTING QUALITY ASSURANCE PROGRAM	13
1. 2. 3.	LIST OF PRE- APPROVED BATSPRE- APPROVAL QUALIFICATIONS	
ELEMI	IENT 7: RESPONDING TO BACKFLOW INCIDENTS	14
1. 2.		
ELEM	MENT 8: PUBLIC EDUCATION PROGRAM	14
Cus	STOMER EDUCATION	14
ELEMI	IENT 9: RECORDS	15
1. 2.		
ELEMI	IENT 10: CROSS- CONNECTION CONTROL FOR RECLAIMED WATER	16
1. 2. 3.	PROHIBITION OF RETURN OF USED WATER	16
	I ATIONISHID TO OTHER DI ANNING AND OPERATIONS PROGRAM REQUIREMENTS	17

Requirements for the Program

Sandy Point Improvement Company (SPIC), Public Water System ID# 76105, hereinafter referred

to as "the Purveyor", pursuant to chapter 246-290-490 WAC (Washington Administrative Code), has the responsibility to protect their public water system from contamination due to cross-connections. A cross-connection is defined for the purpose of this program as "any actual or potential physical connection between a potable water line and any pipe, vessel, or machine that contains or has a probability of containing a non-potable gas or liquid such that it is possible for a non-potable gas or liquid to enter the potable water system by backflow."

All public water systems are required to develop and implement cross-connection control (CCC) programs. The CCC program requirements are contained in chapter 246-290-490 WAC. The minimum required elements of a CCC program are:

- 1. Establishment of legal authority and program policies;
- 2. Evaluation of premises for cross-connection hazards;
- Elimination and/ or control of cross-connections;
- 4. Provision of qualified personnel;
- 5. Inspection and testing of backflow preventers;
- 6. Quality control of testing process;
- 7. Response to backflow incidents;
- 8. Public education for consumers;
- 9. Record keeping for CCC program; and
- 10. Special requirements for reclaimed water use.

Other CCC program requirements include:

- 1. Coordination with the Local Administrative Authority (LAA), i.e., the local building or plumbing official, regarding CCC activities;
- 2. Prohibition of the return of used water into the public water system (PWS) distribution system; and
- 3. Inclusion of a written CCC program in a Water System Plan (WSP) or a Small Water System Management Program (SWSMP).

Note: Throughout this CCC program the term "customer" is used. "Customer" as used herein means the property owner and/ or occupant of the premises served by SPIC (i.e., whoever interfaces with SPIC regarding water service). Also, unless otherwise defined, all CCC-related terms used in this program have the same definitions as those contained in chapter 246-290-010 WAC.

Program Objectives

The objectives of the CCC program are to:

- 1. Reasonably reduce the risk of contamination of the public water distribution system; and
- 2. Reasonably reduce SPIC's exposure to legal liability arising from the contamination of the public water distribution system originating from a customer's premise's plumbing system; and
- 3. Reasonably reduce the onerous application of the law on SPIC customers by working to mitigate the need for isolation through education and the elimination of potential, actual, or existing cross-connection hazards and reducing practices that create hazards.

Summary of Program Decisions

The following table summarizes the major policy and program decisions adopted by the Sandy Point Improvement Company. The items in the table represent CCC program areas that have more than one acceptable approach or option.

Decision Summary Table for the Sandy Point Improvement Company

Summary Table

Type of Program [General, WAC 246-290-490(2)(e)] Premises isolation only		
a. Premises isolation only		
	YES	
b. Premises isolation and in-premises protection (combination program)	NO	
2. Extent of Coordination with LAA [WAC 246-290-490(2)(d)]		
a. Information exchange	YES	
b. Interaction	NO	
c. Joint program	NO	
3. Relationship with Customer [Element 1]		
a. Signed service agreement or contract	NO	
b. Ordinance/resolution; implied service agreement	YES	
4. Enforcement of Corrective Action [Element 1]		
a. Rely upon shut-off of water service	YES	
b. Rely upon SPIC installed/owned/maintained premises isolation	YES	
5. Assessment and Re-assessment of Hazard [Element 2]		
a. By SPIC's staff or equivalent	YES	
b. By CCS employed by customer; report reviewed by SPIC's CCS	YES	
6. Location and Ownership of Premises Isolation Assembly [Element 3]		
a. On SPIC's service line	YES	
b. On customer's service line	YES	
7. CCS Option – SPIC's Program Management [Element 4]		
a. SPIC's staff member certified	NO	
b. Inter-agency agreement or use other agency's CCS	NO	
c. Contract with consultant CCS	YES	
8. Testing of Assemblies [Element 5]		
a. By SPIC-employed backflow assembly tester (BAT)	YES	
b. By customer-employed (contractor) BAT	YES	
9. Cost Recovery [WAC 246-290-100(4)(h) and -105(4)(p)]		
a. Borne by all customers (general water rates)	NO	
b. Assessed to specific class (commercial meters)	NO	
c. Each customer directly bears cost	YES	

The drinking water regulations for Group A public water systems in Washington, WAC 246-290, require CCC programs to include certain minimum elements. The elements are listed in WAC 246-290-490(3). This section describes how Sandy Point Improvement Company intends to comply with each of the required program elements. Elements are numbered the same as they appear in WAC 246-290-490.

Element 1: Authorizing of a CCC Program.

SPIC's Board of Directors approved and authorized the implementation of this CCCP on [Insert Date of board acceptance]. The approval also authorizes SPIC to terminate water service to consumers who do not comply with the resolution. However, the primary method for protection of the distribution system will be the installation of a backflow preventer for premises isolation by SPIC, at the customer's expense. SPIC, at its discretion, will install a backflow preventer if the customer fails to provide requested information within the time allowed. All costs associated with customer specific backflow prevention, including but not limited to installation and testing, will be added to the individual customer's water bill.

Element 2: Evaluating the Degree of Hazard.

Initial Cross-Connection Hazard Surveys

The procedures for evaluating the backflow prevention requirements for new and existing customers are as follows:

- 1. For all new non-residential services (including all non-single-family residences), SPIC will require that the customer submit with the application for water service a completed "Preliminary Cross-Connection Control Hazard Assessment Form". SPIC's CCS will provide guidance on the type of backflow preventer to be installed with recommendations for installation at the meter of either a DCVA or an RPBA if required by WAC 246-290-490. (All non-residential services require a DCVA or an RPBA.) SPIC will specify and install the backflow preventer, if required, as a condition of service to the customer, based on recommendations by the CCS, and bill the customer for the associated costs.
- 2. For all new residential services (single family residences), SPIC will require that the customer submit with the application for water service a completed "Water Use Questionnaire". If the customer's questionnaire indicates special plumbing, such as a lawn sprinkler system, or hazardous water use on the premises, SPIC's CCS will provide guidance on the type of backflow preventer to be installed with recommendations for installation at the meter of either a DCVA or an RPBA. SPIC will specify and install the backflow preventer, if required, as a condition of service to the customer, based on recommendations by the CCS, and bill the customer for the associated costs.
- 3. For all existing non-residential services (including all non-single-family residences), SPIC will require the customer to submit, within three months of notification, a completed "Preliminary Cross-Connection Control Hazard Assessment Form". SPIC's CCS will provide guidance on the type of backflow preventer to be installed with recommendations for installation at the meter of either a DCVA or an RPBA if required by WAC 246-290-490. (All non-residential services require a DCVA or an RPBA.) SPIC will specify and install the backflow preventer, if required, as a condition of continued service to the customer, based on recommendations by the CCS, and bill the customer for the associated costs.
- 4. For all existing residential services (& existing recreational lots), SPIC will require the customer to submit to SPIC, within three months of notification, a completed "Water Use

Questionnaire." If the customer's questionnaire indicates special plumbing, such as a lawn sprinkler system, or hazardous water use on the premises, SPIC's CCS will provide guidance on the type of backflow preventer to be installed with recommendations for installation at the meter of either a DCVA or an RPBA. SPIC will specify and install the backflow preventer, if required, as a condition of continued service to the customer, based on recommendations by the CCS, and bill the customer for the associated costs.

5. For all existing services, should the customer fail to supply the required information for a hazard assessment or fail to submit a completed "Water Use Questionnaire", SPIC may have the assessment made by a CCS employed by the Purveyor, require the installation of an RPBA for premises isolation, or take other such actions consistent with the previously stated policies, and bill the customer for the associated costs.

Cross-Connection Hazard Survey Schedule for Initial Hazard Assessments

The schedule for initial hazard assessment is outlined in Table 2.1 below. The schedule starts from the date the CCC program is established.

Table 2.1

Initial Assessment Task	Schedule (Initiated upon adoption of plan)		
Assessment of all new connections	At time of request for water service		
Identification and assessment of high-hazard premises which are listed on Table 9 of Washington Administrative Code (WAC) 246-290-490	Within nine months		
Identification and assessment of hazardous premises supplemental to Table 9 of WAC 246-290- 490	Within nine months		
Identification of residential connections with special plumbing facilities and/or water use on the premises	Within nine months		

Cross-Connection Survey Schedule for Hazard Re-Assessments

For subsequent cross-connection hazard surveys, procedures for evaluating the backflow prevention requirements are:

- For residential services, SPIC will require the customer to submit to SPIC, within
 two months of SPIC notification, a completed "Water Use Questionnaire." The
 procedure used for evaluating the hazard re-assessment and the potential
 change in the required backflow prevention will be the same as used for the
 initial hazard assessment.
- 2. For all **non- residential services**, SPIC will require the customer to submit to SPIC, within two months of SPIC notification, a hazard re-assessment (at the customer's expense) by a DOH-certified CCS.

SPIC's CCS will, for a fee, perform the hazard re-assessment on the premises if no response is received within the two-month time period.

The frequency of hazard re-assessments will be as shown in Table 2-2below:

Table 2.2

Type of Service	Frequency of Re- Evaluation	
Any services with an Air Gap or RPBA installed for premises isolation	None required as long as the Air Gap and/or RPBA passes annual tests and/or annual inspections	
Commercial services with DCVA installed for premises isolation	Every two years and upon change in use or ownership	
Residential services with RPBA or DCVA installed for premises isolation	Every 5 years and upon change in use, ownership, or plumbing system (questionnaire)	
Residential services with no known special plumbing or water use on the premises	Every 5 years and upon change in use, ownership, or plumbing system (questionnaire)	

SPIC will inform the customer that SPIC's survey of a customer's premises (whether by a representative of SPIC or through the evaluation of a questionnaire completed by the customer) is for the sole purpose of establishing SPIC's minimum requirements for the protection of the public water supply system, and that the required backflow protection will be commensurate with SPIC's assessment of the degree of hazard.

SPIC will also inform the customer or any regulatory agencies that SPIC's survey, requirements for the installation of backflow prevention assemblies, lack of requirements for the installation of backflow prevention assemblies, or other actions by SPIC's personnel or agent do not constitute an approval of the customer's plumbing system or an assurance to the customer or any regulatory agency of the absence of cross-connections.

Element 3: Elimination or Control of Cross-Connections.

Backflow Preventer Requirements

The following service policy shall apply to all new and existing customers:

- SPIC will require that water service to all non-residential customers where actual or
 potential cross-connection hazards exist be isolated at the meter by an air gap or a DOHapproved RPBA or DCVA commensurate with the level of hazard and acceptable to
 SPIC. All high-hazard connections of the type described in Table 9 of WAC 246290-490, reproduced as Exhibit "B", shall be isolated with an air gap or an RPBA.
- 2. SPIC will require all **residential customers** with facilities of the type described in Table 9 of WAC 246-290-490, reproduced as Exhibit "B", to be isolated with an air gap or an RPBA. All other residential customers with special plumbing or water use on the premises that create an actual or potential cross-connection hazard will be isolated with an RPBA or a DCVA, as determined by SPIC's Cross-connection Specialist. "Special plumbing" includes, but is not limited to, the following:
 - a. Alawn irrigation system;
 - b. A solar heating system (some models are exempt);
 - c. An auxiliary source of water supply, e.g., a well, rain catchment system, or creek;
 - d. Piping for livestock watering, hobby farming, water troughs, etc.;
 - e. Hot tubs and swimming pools;
 - f. Ornamental Fountains (some models are exempt);
 - g. Residential fire sprinkler system (some models are exempt);
 - h. Boilers of hydronic heating systems;
 - i. Property containing a small boat moorage;
 - j. Repeat history (including but not limited to 2 occurrences) of crossconnections;
 - ${\bf k}$. Home labs or activities associated with small scale lab activities, photo or otherwise;
 - 1. Some cottage industry or home business activities.
- 3. All remaining residential customers will be isolated at the meter by a purveyor-installed meter check valve (single or dual).
- 4. Customers are considered to have an implied contract with SPIC that requires the customer to bear all reasonable costs of service. In the event a customer is required to isolate their premises by RPBA or DCVA, the cost will include, but not be limited to, those necessary to:
- Purchase and immediately install approved RPBA or DCVA downstream of the water meter in accordance with the SPIC's standards described hereinafter; and
- Maintain, test, and inspect the RPBA or DCVA in accordance with SPIC's standards described hereinafter.

For new customers, SPIC will not turn on water (except for testing purposes) at the meter until the customer complies with the above requirements.

Refusal or failure on the part of the customer to comply with SPIC's installation, testing, and maintenance requirements shall constitute a breach of contract by the customer and as a result, SPIC will:

- Install the RPBA or DCVA at the customer's expense immediately downstream of the water meter in accordance with SPICs standards described hereinafter and Maintain, test and inspect, at the customer's expense, the RPBA or DCVA in accordance with SPICs standards described hereinafter; or at the purveyors option
- Immediately discontinue water service until the customer complies with the installation, testing, or maintenance requirements to SPIC's satisfaction.

Approved Backflow Preventers and Installation

All backflow preventers relied upon by SPIC to protect the public water system shall meet the definition of "approved backflow preventer" as contained in WAC 246-290. SPIC will obtain and maintain a current list of assemblies approved for installation in Washington State from the DOH Office of Drinking Water.

All backflow preventers will be installed in:

- 1 The orientation for which they are approved;
- A manner and location that facilitates their proper operation, maintenance, and testing or inspection;
- 3 A manner that will protect them from weather-related conditions such as flooding and freezing; and
- 4 Compliance with applicable safety regulations.

Installation standards contained in the most recently published edition of the Pacific Northwest Section, American Water Works Association (PNWS-AWWA) CCC Manual or the University of Southern California Foundation for Cross Connection Control and Hydraulic Research (USCFCCCHR) CCC Manual shall be followed unless the manufacturer's requirements are more stringent.

SPIC has no regulatory responsibility or authority over the installation and operation of the customer'splumbing system. The customer is solely responsible for compliance with all applicable regulations and for prevention of contamination of his/her plumbing system from sources within his/her premises. Any action taken by SPIC to survey plumbing, inspect or test backflow prevention assemblies, or to require premises isolation (installation of DCVA or RPBA on service) is solely for the purposes of reducing the risk of contamination of SPIC's distribution system.

SPIC will inform the customer that any action taken by SPIC shall not be construed by the customer as guidance on the safety or reliability of the customer's plumbing system. SPIC will not provide advice to the customer on the design and installation of plumbing other than through the general public education program discussed in Element8.

Except for easements containing SPIC's distribution system, SPIC will not undertake work

on the customer's premises. In the event the existing water meter is located within the boundaries of the customer's property, SPIC, when it becomes aware of the condition, will obtain an easement or move the meter back to within the road easement or right of way.

Schedule for Installation of Backflow Preventers

Table 3.0 shows the schedule that SPIC will follow for the installation of backflow preventers when they are required (based on the hazard evaluation). SPIC may consider granting an extension of time for installation of a backflow preventer for an existing connection if requested by the premise's owner.

Table 3.0

Type of Service	Schedule
New connections with cross- connection hazards	Before service is initiated
Existing connections with Table 9-type hazards classified as severe health hazards	Within a time period acceptable to the purveyor and the purveyor's CCS based on the degree of hazard and risk & not more than 90 days
Existing connections with Table 9-type hazards and other high cross-connection hazards	Within 90 days after notification
Existing connections with other than Table 9 of WAC 246 -290-490 or highcross-connection hazards	Within 180 days after notification (suggested)
Existing fire protection systems using chemicals or supplied by unapproved auxiliary water source	Within 90 days after notification
Existing fire protection systems not using chemicals and supplied by SPIC's water	Within 180 days after notification

Element 4: Qualified Personnel.

Program Administration

- 1. The responsibility for administration of the CCC Program rests with SPIC. General policy direction and risk management decisions are established by the SPIC Board of Directors.
- 2. SPIC will employ or contract with a DOH certified Cross Connection Specialist (CCS) to provide the expertise and services necessary for development and implementation the CCC program.
- 3. The following cross-connection related tasks will be performed by a CCS under the direction of SPIC's General Manager:
 - Preparation of and recommendations regarding changes to the CCC program;
 - Performance of and/or reviews of CCC hazard evaluations;
 - Recommendations on the type of backflow preventer to be installed;

- Recommendations on schedules for retrofitting of backflow preventers;
- Inspections of backflow preventers for proper application and installation;
- Reviews of backflow preventer inspection and test reports;
- Reviews of backflow testing quality control information;
- Recommendations and/ or granting of exceptions to mandatory premises isolation;
- Participation in or cooperation with other water utility staff in the investigation of backflow incidents and other water quality problems;
 - Completion of Backflow Incident Reports; and
 - Completion of CCC Activity and Program Summary Reports.
- 4. SPIC may delegate other CCC program activities to other personnel who are not certified CCSs, including clerical support staff. These activities include:
 - Administration of paperwork associated with service agreements;
 - Mailing, collecting, and initial screening of hazard evaluation/water use questionnaires;
 - Mailing of assembly testing notices;
 - Receiving and screening of assembly testing reports;
 - CCC program database administration and record keeping;
 - Dissemination of public education material; and
 - Assisting tasks associated with coordination with Local Administrative Authority (LAA).
- 5. Upon implementation, the following information will be kept on file at the office and included on all CCCP interagency correspondence and SPIC documentation;

Name of CCS	
Address	
City, State, Zip	
Telephone Number	
CCS Certification Number	

Element 5: Inspection and Testing

1. Inspection and Testing of Backflow Preventers

All backflow preventers that SPIC relies upon for protection of the water system will be subject to inspection and, if applicable, testing.

Inspection and testing of backflow preventers will be as follows:

SPIC's DOH-certified CCS will inspect backflow preventers for proper application

(i.e., to ensure that the preventer installed is commensurate with the assessed degree of hazard).

- Either a DOH-certified CCS or backflow assembly tester (BAT) will perform inspections of backflow preventers for correct installation.
- A DOH-certified backflow assembly tester (BAT) will test all assemblies relied upon by SPIC to protect the public water system.

2. Frequency of Inspection and Testing

Inspection and testing of backflow preventers will be conducted:

- At the time of installation;
- Annually after installation;
- After a backflow incident; and
- After repair, reinstallation, relocation, or re-plumbing.

SPIC may require a backflow preventer to be inspected and/or tested more frequently than once a year, when it protects against a high-health hazard or when it repeatedly fails tests or inspections.

3. Responsibility for Inspection and Testing

SPIC will be responsible for inspection, testing, maintenance, and replacement of all SPIC-owned backflow preventers. The customer whose premises is being isolated by SPIC's backflow preventer will pay SPIC for all cost associated with inspection, testing, maintenance, and replacement of SPIC- owned backflow preventer.

SPIC will require the customer to be responsible for inspection and testing of backflow preventers owned by the customer. The customer shall employ, at customer expense, a DOH- certified BAT, pre-approved by SPIC, to conduct the inspection and test within the time period specified in the testing notice sent by SPIC. The test report shall be completed and signed by the BAT, then countersigned and returned by the customer to SPIC, before the due date specified by SPIC. The customer may request an extension of the due date for returning a test report by submitting a written request to SPIC. SPIC may grant one extension for up to 30 days.

4. Approved Test Procedures

SPIC will require that all assemblies relied upon to protect the public water system be tested in accordance with DOH- approved test procedures as specified in WAC 246-290-490(7)(d).

5. Notification of Inspection and/or Testing

SPIC will notify in writing all customers who own backflow preventers to have their backflow preventer(s)inspected and/or tested. Notices will be sent out not less than 30 days before the due date of the inspection and/or test. The notice will also specify the date (up to 30 days after the notice of the inspection and/or test date is mailed) by which the inspection/test report must be received by SPIC.

6. Enforcement

When a customer fails to send in the inspection/test report within 15 days after the due date specified,

and SPIC has not approved an extension to the due date, SPIC will take the following enforcement action:

- SPIC will send a second notice giving the customer an additional 15 days to send in the inspection/test report.
- If the customer has not sent in the inspection/ test report within 10 days of the due date given in the second notice, SPIC will send a third notice, by certified mail, giving the customer an additional 15 days to send in the report. The notice will also inform the customer that failure to satisfactorily respond to this notice will result in water service shut-off.
- SPIC will send copies of the third notice to the owner and occupants of the premises (if different from the customer).
- If the owner and/or occupants have not responded satisfactorily to SPIC within 10 days of the due date specified in the third notice, SPIC will implement water service shut-off procedures, or install the appropriate backflow preventer at the meter for premises isolation at the customers expense. Collection and enforcement procedures for such charges will be the same as for other water utility bill charges.
- At any time prior to shut- off, SPIC may, if requested by customer, arrange for the
 inspection and/ or testing of the customer-owned backflow preventers by a
 certified BAT and will bill the customer the actual cost of inspection and/or
 testing plus reasonable administrative costs. Collection and enforcement
 procedures for such charges will be the same as for other water utility charges.

Element 6: Testing Quality Assurance Program.

1. List of Pre- Approved BATs

SPIC will maintain a list of local, DOH- certified BATs that are pre-approved by SPIC to perform the following activities:

- Backflow preventer inspection for proper installation; and
- Backflow assembly testing.

The list will be revised annually or more frequently if necessary.

2. Pre- Approval Qualifications

BATs who wish to be included on SPIC's pre-approved list and/or provide testing in SPIC's service area must apply to SPIC and furnish the following information:

- Evidence of current DOH certification in good standing;
- Make and model of testing equipment (BAT listing only);
- Evidence of test equipment verification of accuracy and/ or calibration within the past 12 months (BAT listing only);
- Evidence showing possession of a license to operate a business in Washington State along with a valid bond and insurance.

3. Quality Assurance

SPIC's CCS will review within 30 days of receipt the backflow preventer inspection/test report forms submitted by the customer. SPIC's CCS may accept reports that are signed

by a BAT not on the pre- approved BAT list provided that the same information as listed in "Pre-Approval Qualifications" is also submitted to SPIC along with the backflow preventer inspection/test report.

SPIC's CCS will provide follow-up on test reports that are deficient in any way.

SPIC's CCS will report incidences of fraud or gross incompetence on the part of any BAT or CCS to DOH Operator Certification program staff.

Element 7: Responding to Backflow Incidents.

1. Backflow Incident Response Plan

SPIC has developed a backflow incident response plan, reproduced and attached as Exhibit "H", that will be part of the water system's emergency response program as required by WAC 246-290-415(2) The incident response plan will include, but will not be limited to:

- Notification of affected population;
- Notification and coordination with other agencies, such as WA DOH and Whatcom County Health Department;
- Identification of the source of contamination;
- Isolation of the source of contamination and the affected area(s);
- Cleaning, flushing, and other measures to mitigate and correct the problem;
- Customer recommendations including; flush hot water heater, dump ice cubes;
- Corrective action to prevent future backflow occurrences.

2. Technical Resources

SPIC will use the most recently published edition of the manual, Backflow Incident Investigation Procedures, published by the PNWS-AWWA as a supplement to the Backflow Incident Response Plan for SPIC.

Element 8: Public Education Program.

Customer Education

SPIC will distribute with water bills or by other means, at regular intervals, public education brochures to system customers. For residential customers, such brochures will describe the cross-connection hazards in homes and the recommended assemblies or devices that should be installed by the homeowner to reduce the hazard to the public water system. The education program will emphasize the responsibility of the customer in preventing the contamination of the public water supply. SPIC's staff will produce the public education brochures or SPIC will obtain brochures from:

- PNWS-AWWA;
- Spokane Regional Cross- Connection Control Committee (SRC4);
- Western Washington Cross-Connection Prevention Professionals Group (The Group);

- USC FCCCHR;
- Other national backflow prevention associations, such as the American Backflow Prevention Association (ABPA); and/or
- Other water utilities (with prior approval).

The information distributed by SPIC will include, but not be limited to, the following subjects:

- Cross-connection hazards in general;
- Irrigation system hazards and corrective actions;
- Fire sprinkler cross-connection hazards;
- Importance of annual inspection and/or testing of backflow preventers; and
- Thermal expansion in hot water systems when backflow preventers are installed for premises isolation.

SPIC will distribute information brochures to all customers every two to three years, and to every new customer.

Element 9: Records.

1. Types of Records and Data to be maintained

SPIC will maintain records of the following types of information required by WAC 246-290-490:

- Service connections/ customer premises information including:
 - o Assessed degree of hazard; and
 - Required backflow preventer to protect the public water system.
- Backflow preventer inventory and information including:
 - Air gap (AG) location, installation and inspection dates, inspection results and identity of person conducting inspection;
 - Backflow assembly location, assembly description (type, manufacturer, make, model, size, and serial number), installation, inspection and test dates, test results and data, and identity of person performing test; and
 - o Information on atmospheric vacuum breakers used for irrigation system applications, including manufacturer, make, model, size, dates of installation and inspections, and identity of person performing inspections.

SPIC will maintain records on all assemblies that protect the public water system from contamination. At a minimum, SPIC will maintain records on all premises isolation assemblies required to protect the public water system.

2. Reports to be Prepared and Submitted to DOH

SPIC will prepare the following reports required by WAC 246-290-490, which include:

 Cross-connection control program activities report for the calendar year, to be sent to DOH when requested;

- Cross-connection control program summary information when required or when there are significant policy changes;
- Backflow incident reports to DOH (and voluntarily to the PNWS-AWWA CCC Committee); and
- Documentation when exceptions to mandatory premises isolation are granted.

SPIC's CCS will prepare and sign all CCC-related reports required by WAC 246-290-490.

Element 10: Cross-connection Control for Reclaimed Water.

At this time, SPIC does not receive or distribute reclaimed water. In the event that reclaimed water use is proposed within SPIC's service area, the Board of Directors of Sandy Point Improvement Company will make all cross-connection control requirements mandated by the Permitting Authority in accordance with Chapter 90.46 RCW part of the written CCC program plan and comply with such additional requirements.

1. Coordination with Local Administrative Authority

Both WAC 246-290-490 and the Uniform Plumbing Code amended for Washington require coordination between SPIC and the Local Administrative Authority (LAA) in all matters pertaining to cross-connection control.

SPIC will provide a copy of this CCC program to Whatcom County via a copy of SPIC's water system plan or in a separate document. SPIC will inform the LAA of any changes in policy or procedure that may impact the LAA.

SPIC will provide information to the LAA in a timely manner regarding any:

- Requirement imposed on a residential customer for the installation of a DCVA or an RPBA on the service, with a description of the cross-connection hazard identified;
- Upgrade of the premises isolation backflow preventer, i.e., from a DCVA to an RPBA;
- Action taken to discontinue water service to a customer; and
- Backflow incident known by SPIC to have contaminated the public water system or a customer's plumbing system.

2. Prohibition of Return of Used Water

SPIC must prohibit the intentional return of used water to SPIC's distribution system per WAC 246-290-490(2)(I).

Used water is defined as water that has left the control of SPIC. This includes water used for heating and cooling purposes and water that may flow back into the distribution system from customers with multiple connections. It is the policy of SPIC to:

- Prohibit the intentional return of used water to the distribution system by any customer served by the public water system; and
- Require that all customers, where the hydraulics permit the potential return of used water, to install a backflow preventer (DCVA or RPBA) commensurate with

the degree of hazard; and

 Require that all customers with multiple connections, where the hydraulics permit the potential return of used water, to install a backflow preventer (DCVA or RPBA) commensurate with the degree of hazard at each point of connection.

3. Unapproved Auxiliary Supplies (potable water or irrigation wells)

All water supplies other than those owned by SPIC are considered unapproved auxiliary supplies as defined in chapter 246-290-010 WAC. SPIC will require backflow protection for customers with auxiliary supplies on their premises as follows:

- Per Table 9 of WAC 246- 290 -490, SPIC will require the installation of an RPBA for premises isolation at the service connection to any customer having an unapproved auxiliary supply on the premises that is interconnected with SPIC's water system supply.
- SPIC will require the installation of a DCVA for premises isolation at the service connection to any customer with an unapproved auxiliary water supply not interconnected with SPIC's water system.

4. Temporary Connections

SPIC will not supply water through temporary connections, such as those used for construction projects or main disinfection, except through a backflow preventer arrangement approved by SPIC. The applicant for the temporary connection shall document that the backflow preventer is a DOH-approved model and has passed an inspection and/or test within the past 12 months and/or upon relocation, whichever is more recent.

SPIC will require that interties with other public water systems or wholesale customers be isolated at the point of delivery by:

- A minimum of a DCVA; and
- A minimum of an RPBA if SPIC considers the purchasing system or wholesale customer to pose a high- health hazard to SPIC's system.

SPIC may waive or reduce the level of protection at the intertie if the purchasing public water system or wholesale customer:

- Is a Group A public water system not exempt from DOH regulation as per WAC 246-290-020(2);
- Has a CCC program that complies with WAC 246-290 -490 and has been approved by DOH; and
- Implements the CCC program at a level satisfactory to SPIC.

Relationship to Other Planning and Operations Program Requirements

SPIC will consider the requirements and consequences of the CCC program on the utility's planning and operations requirements. Such considerations include, but are not limited to, ensuring that:

 Adequate communication exists and is promoted between CCC program personnel and other water utility staff;

- Adequate training be provided to all staff to recognize potential crossconnection control problems;
- Cross-connection issues be considered in water quality investigations;
- The design of the water distribution system makes adequate provisions for expected head losses incurred through the installation of or experienced by backflow assemblies;
- CCC program personnel be consulted in the design of water and wastewater treatment facilities and when proposals are made to receive or distribute reclaimed water;
- Operations under normal and abnormal conditions do not result in excessive pressure losses; and

Adequate financial and administrative resources are available to carry out the CCC program.