

**Business of the Village Board
Village of Saranac Lake**

SUBJECT: Cross Connection Program

Date: 11-27-2023

DEPT OF ORIGIN: Village Manager

Bill # 151-2023

DATE SUBMITTED 11-17-2023

EXHIBITS: _____

APPROVED AS TO FORM:

Village Attorney

Village Administration

EXPENDITURE
REQUIRED: \$

AMOUNT
BUDGETED: \$

APPROPRIATION
REQUIRED:

SUMMARY STATEMENT

Resolution to adopt Cross Connection Control Program

RECOMMENDED ACTION

MOVED BY: Scollin

SECONDED BY: Brunette

VOTE ON ROLL CALL:

MAYOR WILLIAMS

yes

TRUSTEE BRUNETTE

yes

TRUSTEE CATILLAZ

yes

TRUSTEE SCOLLIN

yes

TRUSTEE SHAPIRO

yes

RESOLUTION AUTHORIZING THE ADOPTION OF A CROSS CONNECTION CONTROL PROGRAM

WHEREAS, The Village of Saranac Lake strives to protect its residents from unsafe drinking water.

WHEREAS, The NYS DOH mandates in subpart 5-1.31 of the NYS sanitary code. The Village to have a cross connection control program in place to protect the public potable water supply from contamination or pollution, which could backflow or back siphon from a customer's internal plumbing.

NOW THEREFORE BE IT RESOLVED, The Village Board authorize the implementation of the cross connection control program.

THE VILLAGE OF SARANAC LAKE

CROSS CONNECTION CONTROL PROGRAM POLICY

I. PURPOSE

- A. To protect the public potable water supply served by the Village of Saranac Lake from contamination or pollution which could backflow or back siphon from a customer's internal distribution systems.
- B. To prevent new cross connections and eliminate existing cross connections.

II. AUTHORITY

- A. The Federal Safe Drinking Water Act of 1974, as amended in 1986, and Part 5 of the New York State Sanitary Code, Subpart 5-1 Public Water Supplies, Section 5-1.31, states that the water supplier has the primary responsibility to protect the public water system by containing potential contamination within the premises of the customer through cross connection control by containment.
- B. The Village of Saranac Lake requires that customers install and maintain backflow prevention devices in the service connection to contain their facility, if required to do so by the Village.
- C. The New York State Department of Health (NYSDOH) has delegated approval of cross connection control projects to the Village of Saranac Lake for all Water customers.

III. RESPONSIBILITY

- A. The Village will develop a listing of existing connections based upon pressure mapping and known degree of Hazard for priority ranking.
- B. The Village will determine the need for backflow prevention for each customer, existing and proposed on a case by case basis and per hazard rating from the NYSDOH Backflow Prevention Policy. If an approved backflow device is required at a service connection to a customer's premises, the Village will give notice in writing to said customer that an approved backflow prevention device shall be installed at each service connection to the premises.
- C. The customer shall submit New York State Department of Health Form DOH-347, Application for Approval of Backflow Prevention Devices, an engineering report, drawings and other information as required, for each existing and proposed service connection to the Village for approval.
- D. The New York State Education Law pertaining to Professional Engineers and Land Surveyors, Article 145ff, Section 7200, requires that a project involving the safeguarding of life, health and property must be designed by a Registered Professional Engineer (P.E.) of the State of New York. The design of backflow prevention device installations is such a project. The only exception to the P.E. requirement for design is that an architect licensed in this New York State may design the installation per New York State Department of Health Public Water Supply Guide titled "Cross Connection Control", dated January, 1981, Section 9, Paragraph A.
- E. The customer shall install, maintain and test each backflow prevention device at said customer's own expense.

IV. REQUIREMENTS

A. THE VILLAGE OF SARANAC LAKE

1. Upon submission of Site Plan, or any request to the Village for any type or size of water service, the customer will be given information describing the procedures and requirements for approval and installation of backflow prevention devices for containment of the premises. Information provided shall be a copy of this Policy and any other forms as created by the Village.
2. The Village will review the potential for cross connections and the degree of hazard for any existing or proposed service connection. The customer will be notified in writing of the need to comply with the requirements for installation of the backflow prevention devices.
3. The installation of backflow prevention devices by large commercial/industrial customers with existing multiple service connections is complex and expensive. The Village will determine Implementation timetables for existing connections on an individual basis with consideration given to the degree of hazard, time required for design and approval, and budgetary constraints. The time period will be not less than 90 days and not more than 24 months starting with the date of written notification. No extensions of time past 24 months will be granted. For new/modified connections or connections for facilities as part of Site Plan Review, approved installation, and testing shall be completed prior to a Certificate of Use or Occupancy being issued.
4. If the Village determines at any time that an immediate threat to the public health exists, the water service will be terminated.
5. The Village will meet with customers and perform a physical inspection of the premises as needed.

B. CUSTOMER

1. The customer shall provide the Village any and all information concerning facilities, process, water usage, existing backflow prevention devices and other information as required by the Village. This information shall include all Application Form, Engineering Reports, Plans, and supplemental information as required by the Village.
2. The customer is responsible for all application fees and costs to review submitted materials for accuracy and conformance with NYS DOH requirements.
3. The customer is responsible for all internal cross connection control.
4. The customer, after receiving written notification from the Village of the need to contain his premises with backflow prevention devices, shall at the customers expense install, modify, inspect, maintain, replace and test as required, any and all backflow preventers on their premises used to contain the premises. The customer will also be responsible for the installation, testing and maintenance of all internal backflow prevention devices.
5. The customer shall install only those backflow preventers approved by the New York State Department of Health.
6. The customer shall arrange for periodic testing, by a certified backflow tester, of all backflow prevention devices, to be performed at their expense. All containment backflow prevention devices shall be tested at least annually or more frequently if required by the Village. All testing shall be performed by New York State certified backflow prevention device testers. Any device which fails a test must

be repaired or replaced at the customer's expense. Upon completion of repairs or replacement, the backflow prevention device must be retested by a certified tester to ensure proper operation.

7. The customer shall submit New York State Department of Health Form DOH-1013, Report of Test and Maintenance of Backflow Prevention Device, to the Village within 45 days of the installation of a backflow preventer, and thereafter not exceeding one year from the date of the previous test.
8. The customer shall install backflow preventers only as approved by the Village. No unauthorized modifications to the approved design are allowed. If uninterrupted water service is required, multiple backflow preventers shall be installed to allow for testing and maintenance. The customer shall not install an unprotected bypass around any backflow preventer. The customer shall not modify any backflow preventer in any way without the approval of the Village.
9. The customer shall ensure that all drains and drain ports are clear and operating for all backflow preventers. The customer shall ensure that all backflow preventers have adequate security measures.
10. The Customer shall provide access to premises to Village staff to confirm information provided, inspect backflow prevention devices, and conduct additional testing as necessary.

V. EXISTING BACKFLOW PREVENTION DEVICES IN SERVICE

- A. Existing backflow preventers will be allowed to continue in service by the Village if the existing backflow prevention device is determined to be adequate and effective protection for the degree of hazard of the premises. All periodic testing and maintenance records of existing backflow prevention devices shall be made available to the Village upon request.

VI. TESTING AND RECORD KEEPING

- A. The Village will keep and maintain records of installed backflow prevention devices and records of periodic tests. Customer will be notified in writing by the Village when a periodic test is past due. If a customer does not comply within 30 days of the test due date, water service may be terminated.
- B. High hazard situations will not be allowed to continue operating unprotected if the backflow preventer fails the periodic test and cannot be repaired or replaced immediately. Parallel installation of multiple backflow prevention devices is recommended where uninterrupted services are required.
- C. Random testing of backflow prevention devices may be performed by a Village certified tester to confirm compliance. Customer shall pay for testing by Village if not in compliance with the requirements of this Policy.

VII. PUBLIC FIRE HYDRANTS

- A. No person, except as specifically authorized by the Village, will be allowed to use any fire hydrant for any use whatsoever other than for firefighting purposes. The use of public fire hydrants for washing streets, flushing sewers or other municipality needs will be done through a backflow-protected meter assembly issued to the municipality by the Village.

VIII. DEGREE OF HAZARD

- A. Domestic services for one or multifamily up to four stories in conformance with the

following are considered to be non-hazardous and do not require backflow protection.

1. No connections to an auxiliary water supply such as a well, cistern or spring.
 2. No booster pump.
 3. No water powered sump pump (ejector or siphon pump).
 4. No lawn sprinkler or irrigation systems (except those with vacuum breakers, no pumps and no provisions for chemical injection.)
 5. No other potential hazards including, but not limited to, boiler feed corrosion inhibitors, antifreeze loops, and single wall heat exchangers.
 6. No commercial or agricultural use.
- B. Private fire protection services in conformance with the following are considered to be aesthetically objectionable and require a double check valve assembly to provide cross connection control by containment.
1. No provision for chemical addition.
 2. No private fire hydrants.
 3. No connections to a secondary water supply.
 4. Not within 1,700 feet of an auxiliary water supply such as a pond, lake, river or creek.
- C. Combination services in conformance with the criteria outlined in A and B above are considered to be aesthetically objectionable and require a double check valve assembly to provide cross connection control by containment. A combination service is one which provides both domestic use and fire protection.
- D. All other types of service connections are considered hazardous and require a reduced pressure zone backflow preventer or air gap to provide cross connection control by containment.

IX. INSTALLATION OF BACKFLOW PREVENTERS

- A. For all backflow prevention installations:
1. All proposed installations shall be approved by the Village and NYS DOH prior to the start of construction.
 2. The water meter shall be installed adjacent to and upstream of the backflow preventer. Any meters that have a by-pass line around the meter must have a locking valve installed on the by-pass. By-pass lines will be installed upstream of the backflow preventer. Locks will be provided by the Village to prevent unauthorized bypass of the water meter. Locks tampered with or damaged will be subject to a financial penalty or termination of water service.
 3. A shutoff valve shall be installed upstream of the meter.
 4. All installations shall comply with the drainage specifications, clearance dimensions and other requirements as set forth in the NYS DOH CROSS CONNECTION CONTROL MANUAL, Guidelines for Designing Backflow Prevention Assembly Installations (Supplement to the Cross Connection Control Manual, and Village code.
- B. Installation in a below grade vault is not allowed without written approval from the Village and will adhere to Village terms.

- C. Installation in a building is allowed provided that all of the following conditions are met:
 - 1. The meter and backflow preventer shall be installed on an exterior wall, at a location closest to the point where the water service enters the building.
 - 2. Waterlines shall not be installed within the building, under a concrete slab, upstream of the meter and backflow preventer.
 - 3. Must follow all state guidelines.
- D. The customer shall provide access to the Village for inspection of backflow preventer installation, and periodic inspections as required to confirm compliance with this Policy.

X. ENFORCEMENT

- A. Failure, refusal or inability on the part of the customer to comply with these requirements will result in denial of new service requests for new customers and termination of service for existing customers.
- B. The decision of the Village regarding the need for backflow prevention is final.
- C. The Village reserves the right to revise these requirements and to allow exceptions on a case-by-case basis.

XI. REFERENCES

- A. United States Environmental Protection Agency.
- B. New York State Sanitary Code.
- C. New York State Department of Health Public Water Supply Guide, "Cross Connection Control".
- D. NYSDOH "Guidelines for Designing Backflow Prevention Assembly Installations", Supplement to 1981 Cross Connection Control Manual, reprinted 2012.
- E. Village of Saranac Lake Water & Sewer code
- F. American Water Works Association Manual M14, "Recommended Practice for Backflow Prevention and Cross Connection Control",

THE VILLAGE OF SARANAC LAKE
CROSS CONNECTION CONTROL PROGRAM POLICY
SUBMISSION AND APPROVAL PROCEDURES

1. Water customer notifies the Village of Saranac Lake of intent to make and maintain a service connection to the public water system. Notification may consist of water service application, site plan application, building permit application or direct contact.

OR

Existing water customer is notified by the Village of Saranac Lake that a backflow prevention device is required based upon hazard classification.

2. The Village of Saranac Lake investigates conditions at the site of the proposed service connection or existing service connection and requests technical advice from the Local DOH office if necessary.
3. The Village of Saranac Lake requests water customer complete form _____. If required the customer shall submit and engineering report, plans and application (Form DOH-347) for proposed backflow prevention in quadruplicate with original signatures.
4. Once engineering report, plans, and specifications have been submitted, the Village of Saranac Lake will request a retainer for third-party review (if applicable), review, request any changes from the customer as required for compliance. Once the Village has reviewed the materials submitted and has no further requests for changes, the Village will forward all documents to the local DOH office for review.
5. Local NYS DOH office (and if applicable, the Bureau of Water Supply Protection) evaluates the application, plans, and engineering report, approves application, sends letter of approval, and copy of approved plans to the Village of Saranac Lake for approval, or disapproves and returns submission for modification and re-submittal.
6. The Village of Saranac Lake adds approval, forwards copies of each document to the water customer, local DOH and retains a copy.
7. Customer installs approved devices in accordance with the plans approved.
8. Customer has installed devices tested at initial installation and at least annually by a NYS Certified backflow prevention device tester, and copies of inspection form (Form DOH 1013) are retained by the Customer and sent to the Village of Saranac Lake.



THE VILLAGE OF SARANAC LAKE CROSS CONNECTION CONTROL PROGRAM INITIAL QUESTIONNAIRE

Please Circle

1. Is the water service connection serving a one or two family residential dwelling?

Yes No

If yes, proceed to question 2.

If No, then an Application for Approval of Backflow Prevention (DOH-347), Engineering Report, and Plans are required to be submitted to the Village.

2. Are any of the following features existing, proposed, or anticipated?

Connection to auxiliary water supply (well, cistern, or spring)	Yes	No
Fire Sprinkler System	Yes	No
Water powered sump pump	Yes	No
Pressure Booster Pumps	Yes	No
Lawn Sprinkler / Irrigation Systems	Yes	No
Commercial or Agriculture Use	Yes	No
Boiler Feed Corrosion Inhibitors	Yes	No
Anti-Freeze Loops	Yes	No
Single Wall Heat Exchange Systems	Yes	No

If any answer to 2 is Yes, then an Application for Approval of Backflow Prevention (DOH-347), Engineering Report, and Plans are required to be submitted to the Village.

If all answers to 2 are No, the water service connection is considered non-hazardous, requiring only single check valve installation.

Signature of Customer: _____

Printed Name: _____

Date: _____

Note: The Village of Saranac Lake may require additional backflow prevention devices if the information presented in this questionnaire differs from field conditions.

State of New York Department of Health
Saranac Lake District Office
41 St. Bernard Street
Saranac Lake, NY 12983-1834
(518) 891-1800
saranaclake@health.ny.gov

Water System Field Compliance Inspection Summary Report

Operation: Saranac Lake V (ID: 360015)
Facility Name: SARANAC LAKE V WS
Facility Code: 1600011
Facility Address: Main Street, Saranac Lake, NY 12983
NYS Public Water Supply (PWS) ID: NY1600011

To the Attention of:

Dustin Martin
Village of Saranac Lake
39 Main Street, 2nd Floor, Ste 9
Saranac Lake , NY 12983
Email: dpw1@saranaclakeny.gov

Sanitary Survey

Date: July 7, 2023 08:00 AM
Inspector: Marlene Martin (marlene.martin@health.ny.gov)
Responsible Person: Dave Lewis And Dustin Martin

Summary

Number of Critical Violations Found: 0
Number of Other Violations Found: 0
Number of Deficiencies Found: 1

Reinspection is not Required

Each item found in violation is reported below along with the code requirement.

NO CRITICAL VIOLATIONS REPORTED

NO NON-CRITICAL VIOLATIONS REPORTED

DEFICIENCIES FOUND

DISTRIBUTION SYSTEM

Level of deficiency: Significant

Inspector Findings: The Village of Saranac Lake does not have an approved Cross Connection Control Program (Backflow Prevention Plan). I understand that Dave has prepared a plan and he and Dustin are partially implementing the plan; however, a formal Cross Connection Control Plan must be adopted by the Village and implemented within 90 days.

Water System Information

Source Type: Ground,
Type of Disinfection: Chlorine (Cl),
Disinfection Waiver Issued? No
4-Log Treatment Installed? No

Coliform Surveillance Sample Collected? **No**

Chlorine Residual Reading(s):

1) CI Residual: 0.52 Time: 11:15 A Location: DOH kitchen cwt

Water System Notes:

Comments: No violations were observed during the inspection.

Marlene R Martin

Inspector: Marlene Martin (marlene.martin@health.ny.gov)