

Minutes
Spruce Pine Town Council
Monday, April 10th, 2023

A meeting of the Town Council was held on April 10, 2023. Present were Mayor Darla Harding and Council Members Jackie Rensink, Larry McKinney, and Rocky Buchanan. Staff in attendance included Darlene Butler, Crystal Young, Michael Wood, Shelley Buchanan, and Libby Phillips. Others attended, including Chad Donnahoo, Donnie Staton, Dori Settles, Jim Settles, Lori McIntyre, Jerry Jimison, Sherry Sautner, and Lynn Holler.

CALL TO ORDER

Mayor Darla Harding called the regular meeting to order at 5:30 PM. Jackie Rensink gave the invocation. Larry McKinney led the Pledge of Allegiance.

APPROVAL OF AGENDA

Rocky Buchanan moved to approve the agenda as presented. Jackie Rensink seconded the motion, which carried with all present in favor.

APPROVAL OF MINUTES

Rocky Buchanan moved to approve the minutes of the regular meeting of March 13, 2023. Larry McKinney seconded the motion, which carried with all present in favor.

Larry McKinney moved to approve the minutes of the regular meeting of March, 27, 2023. Jackie Rensink seconded the motion which carried with all present in favor.

APPOINTMENTS

Sherry Sautner gave an update on the Spruce Pine Alien Festival to be held in June. She advised that she has everything in place for the vendors, road closure, liability insurance, food trucks, outhouses, and security. She advised she is working closely with Mitchell County Emergency Management, Mitchell Medics, and Spruce Pine Police Department to ensure a safe and fun experience for families.

Jerry Jimison, a resident of the Fairground Street Apartments addressed the Council concerning the sidewalks around the complex and to the public library. He noted the sidewalks are either non existent or not power chair accessible. He said it is very dangerous trying to get to the library and watch for traffic as there are places you must be in the roadway. Mayor Harding assured Mr. Jimison the Town would look into this issue.

PUBLIC COMMENT- none

DEPARTMENT UPDATES

Public Works

- Russell Lankford was unable to attend due to being on vacation. He did provide a monthly report, which is incorporated by reference and attached to these minutes.

Parks and Rec

- Michael Wood presented his directors report which is incorporated by reference and attached to these minutes. Mayor Harding asked if there is still a plan to install a water slide at the Brad Ragan Park pool. Mike responded this plan is still in the works and they are working through all of the rules and regulations. He also noted the splash pad will hopefully be completed by the end of spring.

Water & Sewer

- Donnie Staton presented his monthly Veolia report. Said report is incorporated by reference and attached to these minutes. Donnie shared that it's been a rough couple of months with several repairs and replacements in the water and sewer departments. Most of these have come from simply the age of the machinery. He noted he is still seeing supply chain issues as he has not received some orders placed last budget year.

Main Street

- Libby Phillips presented the Main Street Director's report for the month of March, which is incorporated by reference and attached to these minutes.

Finance

- Finance Officer Crystal Young presented the third quarter financials through the end of March. She noted that 97.2% of property taxes have been collected to date. She mentioned an increase in state retirement rates. The NC Debt Setoff Program has been successful and the Town has collected \$812.49 so far this year. Crystal shared the amounts being requested by the nonprofit organizations the Town helps to fund. Spruce Pine Public Library has requested \$101,970 which is a \$2000 increase from last year. The Toe River Arts Council has requested a \$1,000 increase this year. The Mitchell County Chamber of Commerce requested \$10,000 as opposed to \$5,000 last year. The Mitchell County Animal Rescue requested an increase from \$1,000 to \$5,000. Big Brothers/Big Sisters of WNC requested \$1,000, which indicates no increase. She advised she will be ready to discuss the preliminary proposed budget by the next meeting.

Police Department

- Chief Bill Summerlin was unable to attend.

ACTION AGENDA

Darlene presented the first reading of the Spruce Pine Public Works Department Cross Connection Control Ordinance. She summarized this ordinance that will protect the public potable water supply from pollution and contamination. Said ordinance is incorporated by reference and attached to these minutes. This ordinance, once adopted, will mandate backflow assemblies for consumers identified as having a backflow potential of non-potable water.

Darlene presented a request by the Spruce Pine Housing Authority to vote on a new board appointment. It was the consensus of the Council to table this request pending a meeting with the SPHA to discuss further. Audience member Jerry Jimison detailed several grievances related to the housing authority.

Larry McKinney moved to provide water at outside rates with no annexation to Connie Ray at 12348 US 19E Hwy. Rocky Buchanan seconded the motion, which carried with all present in favor.

TOWN MANAGER

- ✓ Darlene attended the Blue Ridge Rising meeting. The purpose of the meeting was to collaborate with the gateway communities off of the Blue Ridge Parkway.
- ✓ Mitchell County Commissioners have requested a presence from the Council at their May 1st meeting to discuss the Opioid Settlement.
- ✓ Darlene signed a proposal from Ronnie Benton for replacement of the heating and cooling unit at the library for \$28,465. She thanked Rocky Buchanan for the recommendation as this saved the Town money.
- ✓ The Mitchell County Building Inspector held a public hearing at the town hall this afternoon giving the property owner of 116 S Dale Street the opportunity to be heard before further condemnation procedures begin. No one attended this hearing. The building inspector will move on to the next steps in this matter.
- ✓ Darlene advised the Council she will be out of the office all next week but will be available by phone.

MAYOR/COUNCIL REQUESTS / COMMENTS

- Rocky Buchanan asked if the town has a trash ordinance. Darlene advised there is a nuisance ordinance which states the mayor will notify the property owner by letter that the matter needs to be resolved.

CLOSED SESSION #1

Mayor Harding asked for a motion to enter into closed session. Larry McKinney made a motion to enter into closed session citing NC G.S. 143.318.11(a) (6). Jackie Rensink seconded the motion, which carried with all present in favor.

CLOSED SESSION #2

Mayor Harding asked for a motion to enter into closed session for a second time. Larry McKinney made a motion to enter into closed session citing NC G.S. 143.318.11a (2). Jackie Rensink seconded the motion, which carried with all present in favor.

Upon return to open session Rocky Buchanan made a motion to award the Jim Brown Scholarship to the applicant agreed upon during closed session. Jackie Rensink seconded the motion, which carried with all present in favor.

ADJOURNMENT

With no further business, the meeting was adjourned by motion of Larry McKinney at 7:06 PM.

Shelley Buchanan
Shelley Buchanan, Town Clerk

Darla Harding
Darla Harding, Mayor

Larry McKinney
Larry McKinney, Mayor Pro Tem

Rocky Buchanan
Rocky Buchanan, Council Member

ABSENT

James Acuff, Council Member

Jackie Reñsink
Jackie Reñsink, Council Member

Town of Spruce Pine Monthly Report

March 2023

Public Works Department

Work Order Summary for March 2023:

Unlock and turn on meter 10

Turn off and lock meter 7

Brush 25

Leaves 11

Locates 53

New Meters 13

Meter Checks 32

White Goods 5

Cardboard (weekly)

Water Leaks 10

Sewer Leaks 3

Water Taps 0

Sewer Taps 0

Graves 1

Unstopped culverts/ditches 4

Removed Trees from road 3

March Misc. work summary:

We all spent half a day cleaning up the cemetery. We had two truck loads of sticks, 1 truck load of old flowers and dead flowers and 7 dump truck loads of leaves. There are a few trees that need to be looked at to possibly be removed. I am afraid they may drop limbs or fall and damage head stones.

We repaired to yard hydrants at Mica Street and Mitchell lift stations.

We bought heavy duty flag holders for all the lights on the bridge. We made brackets for each one and installed them on the pole. They should last a long time.

We had a huge job on Buchanan Street. We had to replace 125 feet of 6-inch sewer line that was collapsed and some of it missing. We had to cross several storm drains, sewer lines and water lines. The road had to be cut 7 times. It is done and fixed right but it was a big job.

We fixed the bathroom sink and the bathroom door closer at the police station.

We have started the 208 oak avenue job. We made two 2-inch taps on the main line. We are ready to set our manifold which is 11 meters and a fire line next week. We are waiting on them to set their backflow preventer and drill holes to hook up to our meters. We have kept up caution tape and cones to make the hole very visible till covered.

The valve that supplies Aqua water from our system busted. We helped them replace it. They couldn't get water and it was a leak for us.

We installed a new toolbox we had on the track hoe trailer. We also greased both the backhoe and track hoe.

The new big Christmas ornaments came in. We took those to Whitson's for storage.

The cross connections letter and questionnaire are ready to send out the week of April 17th. I will need your support because I am afraid most of these places required to have one does not. We will see.

We cleaned 900 feet of sewer line.

We replaced several lights inside and out at town hall.

We repaired a sign from the island on lower street that had been ran over.

We worked on the road from the lower gate back to the bridge at the end of Beaver Creek. The road that leads to the dam.

We swept five streets other than our usual sweeping we do weekly.

We did storm drain repairs at Harris Heights, Greenwood and at the intersection of Valley and Mineral streets.

Russell Lankford

Public Works Director



Parks and Recreation Department

Office (828)765-3012

Cell (828) 385-2179

Town of Spruce Pine Board Meeting

April 10, 2023

General Park Maintenance

- Morning and Night check list completed each day
- Trash pick-up in town

Brad Ragan Park

- One playground has been completed
- New French drain installed around second playground
- New basketball goals are installed
- New sitting pier around basketball court is completed
- New walking bridge between the two playgrounds is completed
- Meet with trail builders
- Cleaned up limbs and fallen trees from storm
- Started mowing and weed eating
- Rec, U8 baseball and softball begins this month and runs through May 19th
- Working on landscape around playground

Riverside Park

- Started mowing and weed eating
- Cleaned up trees and limbs from storm
- Harris baseball and soft ball has about 3 to 4 weeks left
- Had trees removed from banks
- Had trees removed and trimmed up around new splash pad area
- Grading for the splash pad has begun

Shelter Reservations

- Started taking reservation for the 2023 season on April 3rd
- Have the new reservation boards for the shelters at Brad Ragan

Pool

- Started taking pool rentals for June, July, and the first week in August
- Should be able to take the cover off in the next few weeks and start the process of getting ready to open, would like to open on Memorial Day weekend

Town

- Blew off sidewalks and picked up trash

Other Business

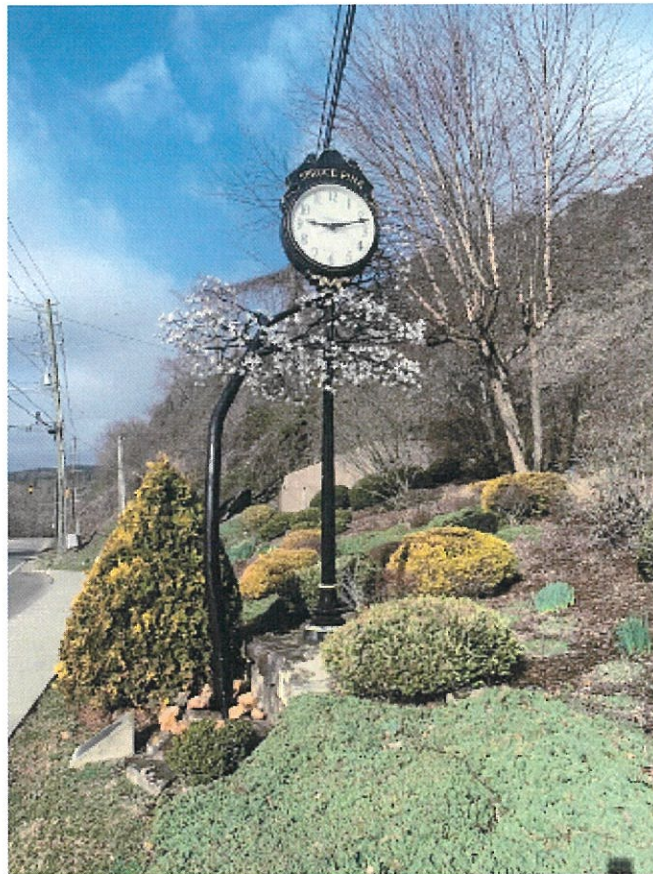
- On the 18th of April will be attending career day at Mitchell High School



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MONTHLY REPORT
OF THE
WATER AND WASTEWATER FACILITIES
SPRUCE PINE, NORTH CAROLINA



PREPARED
FOR THE
TOWN OF SPRUCE PINE
FEB/MAR 2023



FEB/MAR 2023 MONTHLY REPORT
 SPRUCE PINE WATER/WASTE PLANTS
 OPERATED BY VEOLIA NORTH AMERICA

WATER SYSTEM

The water plant, pump stations, and both wells operated in full compliance with all State and Federal rules for both months. The Water Plant collected twelve bacteriological samples from the distribution system and all were clear. We also collected all quarterly compliance samples at the plant, the well, and out in the system. All were good. Number one well pump went out and had to be replaced. The intakes at toe river had to be cleaned out by divers from N water services. CCU installed a better control system for the intake blow outs at the pump house to insure that this will never happen again. One of the overlook pumps went out and is scheduled to be repaired onsite by SW services. One of the Mitchell High water pumps went out and has been repaired onsite by SW services. The VFD display went out on our new number one well pump controls. Blue Ridge Stand By power repaired. KDT did some preventative maintenance on chlorine feed systems at both plants.

CAPITAL PROJECTS

- The new pump/motor assembly has been ordered for the Summit Avenue water station. As of now it has still not arrived. It was ordered in July 2022.

PRODUCTION

	PRODUCTION MG	AVG GAL/DAY LEAVING PLANT MG	GALLONS USED TO BACKWASH FILTERS
Water Plant	65.46	1.13	152000
Wells	5.4		

	WATER TURBIDITY
Raw NTU	1.3
Finished NTU	.03
Fed. Limit	.3

EFFLUENT CHLORINE RESIDUAL
1.47

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WASTEWATER

The wastewater plant operated in full compliance with all State and Federal rules for both months. The wastewater plant sent out samples of total nitrogen, total phosphorus, hardness, and COD. All compliance samples were collected and analyzed.

Mayland septic service pumped all trash out of both prison pump stations.

Waste plant staff pulled and unclogged Carters Ridge sewer pumps 5 times during this 2 month period. We definitely have a problem at this station and we are working on a solution.

BRSP replaced the block heater on the generator at Burleson Hill pump station.

SW services rebuilt one of the pumps from Sullins Branch pump station and the wastewater crew installed it along with help from town maintenance.

BRSP installed new wiring on the number 2 clarifier.

NOTE: We are having Mayland Septic Service to pump the trash out of the Carters Ridge pump station twice a month to see if it will reduce the need to pull the pumps because of clogging.

CAPITAL PROJECTS

- The new pumps that were ordered for Beaver Creek and the Lower Prison pump stations have been installed. They were ordered in July of 2022.

ANALYSES

	INF AVG MG/L	EFF AVG MG/L	% REMOVAL
BOD	213.2	3.2	98%
TSS	419.4	8.4	99%

OTHER CONSIDERATIONS

- Our 3 new hires are still doing great.

Respectfully Submitted,

Donnie Staton

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Spruce Pine Main Street Directors Report

PR- The festival is 3 weeks away. We have 6 new vendors this year and 7 food trucks. We are considering extending the space down past Link. Merchandise has been ordered including FOM shirts and hats as well as general merchandise of Koozie cups, water bottles, bags. I have purchased a tablet and have square credit card reader set up as a payment option. Merchants will be offering Fire on the Mountain themed food, drinks, merchandise the month of April to coincide with festival. Summer Park events include movie nights, Mosaic Mondays, and scarecrow contest. We are planning to have a couple food trucks for movies in the park. I am also working with TRAC and the Chamber Ensemble to host free concert events in May and September. Downtown worship is May 3rd. Sherry Sautner has requested to use the park for the Alien Festival. We received another park sponsor from Live Oak Gastropub bringing our total to \$2600.

D&B- Downtown clean-up is this Saturday, April 15th with a rain date of April 22nd. We would like to get the pots planted, trash pickup, painting safety stripes, trimming hedges and cleaning up parking lots. Volunteers are needed. Committee is working on getting some recommendations for brick specialist that we can put in our façade package if we get the new small grants allowance. We are working within group to create an advisory team to solicit interest in public art piece for display in the park. Bridge bid will be let on May 3rd by DOT.

ERC-DEAP applicant will not be applying this session. Development continues downtown on several buildings. New retaining wall at Toe River Garage, new roof and interior improvements at the Bennett building. New storefront and windows in at Wellborn's and ready to rent. Terraine Glass has moved and the building is available. Southwest Trading inventory is very low. Building has been rented already. The "Local" renovation continues with new windows installed last week. There will be a total of 9 possible new apartments/Air B&B options downtown. There are 2 businesses expanding in the next few months. TREATS has slowly been renovating the side front for a gallery/retail and gathering space. Upstairs studios are mostly renovated and rented with a waiting list. The old U-Haul building has been bought and is currently being renovated for studio and retail space. Todd Leoni is looking for a landlord to manage the Spruce Pine Inn. Several office spaces are now available downtown.

Organization- Emma and I attended the conference on March 14-16 where Emma will be recognized as the MS Champion. Next conference event will be held in Goldsboro. Requests for park use have increased and applications are coming in for use. Bids for service were posted this month. Board has been working on new board member and officer recommendations for next year. I hired a new assistant – Kirsten Rapp. She has done an amazing job in the month she has been here. TDA is working with the state to bring a social media influencer to Mitchell County on April 28-May 1 for the NC Tourism Recovery Program. NCMS will be here for a site visit on June 15th. Board members and new hire will attend the Economic Vitality training on April 20th (virtually). I have 6 service flags donated from the DAV to be used on the bridge during May.

Spruce Pine
Public Works Department
Cross Connection Control Ordinance

Approved:

Effective:

Spruce Pine Ordinance for the Control of Backflow and Cross Connections

A. Cross Connection Control-General Policy

1. INTRODUCTION

The purpose of this Cross Connection Control Ordinance is to eliminate all cross connections within the public potable water supply operated by or under the authority of the Town of Spruce Pine.

This ordinance shall apply to all consumers connected to any water system operated by or under the authority of Spruce Pine.

This ordinance complies with the Federal Safe Drinking Water Act (P.L. 93-523), the North Carolina State Administrative Cod (Title 15A, Subchapter 8C.0709), and the North Carolina State Building Code (Volume II), as they pertain to cross connection within the public water supply. In accordance with General Statute (162A-9.1) the Town is authorized and empowered to adopt this ordinance.

2. OBJECTIVE OF ORDINANCE

The specific objectives of the Ordinance are as follows:

- a. To protect the public potable water supply of Spruce Pine from the possibility of contamination or pollution by isolating within its consumers' water systems such contaminants, waterborne health hazards and other significant pollutants the could backflow into the public water system.
- b. To eliminate or control existing cross connections, actual or potential, between the consumers' potable water system(s) and non potable water systems, plumbing fixtures and industrial piping systems and;
- c. To provide a continuing inspection program of cross connection control that will systematically and effectively control all actual or potential cross connections that are installed in the future.

3. DESIGNATION OF RESPONSIBILITY

a. Health Agency's Responsibility

The North Carolina Department of Environment and Natural Resources (Division of Environmental Health) has the responsibility for promulgating and enforcing laws, rules, regulations and policies applicable to all water purveyors in the State of North Carolina in carrying out an effective Cross Connection Control Program.

The Division of Environmental Health also has the primary responsibility of ensuring that the water purveyor operates a public potable water system free of actual or potential sanitary hazards including unprotected cross connections. The Division of Environmental

also has the responsibility of ensuring that the water purveyor provides an approved water supply at the service connection to the consumer's water system and further, that the purveyor requires the installation, testing and maintenance of an approved backflow prevention assembly on the service connection when required.

b. Spruce Pine

Except as otherwise provided herein, the town of Spruce Pine is the water purveyor and is responsible for ensuring a safe water supply begins at the source and includes all of the public water distribution system, including the service connection and ends at the point of delivery to the consumer's water system. In addition, the Town shall exercise reasonable vigilance to ensure that the consumer has taken the proper steps to protect the public water system. The Town will determine the degree of hazard or potential hazard to the public potable water system, the degree of protection required and will ensure proper containment protection through an ongoing inspection program. The Town will identify all facilities where approved backflow protection assemblies are required to be installed.

When it is determined that a backflow prevention assembly is required for the protection of the public system, the Town shall require the consumer, at the consumer's expense, to install an approved backflow prevention assembly at the service connection, to test immediately upon installation and at a frequency determined by the Town, to properly repair and maintain assembly or assemblies and to keep adequate records of each test and subsequent maintenance and repair, including materials and/or replacement parts.

c. Plumbing Inspector's Responsibility

The plumbing inspections department of the Town shall have the responsibility to review building plans, inspect plumbing as it is installed and shall have the explicit responsibility of preventing cross connections from being designed and built into the plumbing system within the Town. Where the review of building plans suggests or detects the potential for cross connection being made an integral part of the plumbing system, the plumbing inspector has the responsibility, under the North Carolina Building Code, for requiring that such cross connections be either eliminated or provided with backflow prevention equipment approved by the North Carolina State Building Code. Furthermore, any cross connections must meet the requirements of this Ordinance. The plumbing inspector's responsibility begins at the point of delivery downstream of the first installed backflow prevention assembly and continues throughout the entire length of the consumer's water system. The inspector should inquire about the intended use of water at any point where it is suspected that a cross connection might be made or where one is actually called for by the plans. When a cross connection is discovered it shall be mandatory that a suitable, approved backflow prevention assembly approved

by the North Carolina Building Code, North Carolina Department of Environment and Natural Resources and the Town be required by the plans and be properly installed.

d. Consumer's Responsibility

The consumer has the primary responsibility of preventing pollutants and contaminants from entering his/her potable water system or the public potable water system. The consumer's responsibility starts at the point of delivery from the public potable water system and includes all of his/her water system. The consumer, at his/her expense, shall install, operate, test and maintain approved backflow prevention assemblies as directed by the Town. The consumer shall maintain accurate records of tests and repairs made to backflow prevention assemblies and shall maintain such records for a minimum period of three (3) years. The records shall be on forms approved by the Town and shall include the list of materials or replacement parts used. Following any repair, overhaul, or relocation of an assembly, the consumer shall have it tested to ensure that is in good operating condition and will prevent backflow. Tests, maintenance and repairs of backflow prevention assemblies shall be made by a Certified Backflow Prevention Assembly Tester.

e. Certified Backflow Prevention Assembly Tester Responsibility

When employed by the consumer to test, repair, overhaul or maintain backflow prevention assemblies, a Certified Backflow Prevention Assembly Tester (Tester) will have the following responsibilities:

- I. The Tester will be responsible for making competent inspections and for repairing, or overhauling backflow prevention assemblies and making reports of such repairs to the consumer and the Town on forms approved by the Town.
- II. The Tester shall include the list of materials or replacement parts used.
- III. The Tester shall be equipped with and be competent to use all the necessary tools, gauges, manometers and other equipment necessary to properly test, repair, and maintain backflow assemblies
- IV. It will be the Tester's responsibility to ensure that original manufactured parts are used in the repair of or replacement of parts in a backflow prevention assembly.
- V. It will be the Tester's further responsibility not to change the design, material or operational characteristics of an assembly during repair or maintenance without prior approval of the Town.
- VI. The Tester shall perform the work and be responsible for the competency and accuracy of all tests and reports.
- VII. The Tester shall provide a copy of all test and repair reports to the consumer and to the Town within ten (10) business days of any completed test or repair work.

VIII. The Tester shall maintain such records for a minimum period of three (3) years.

All Certified Backflow Prevention Assembly Testers must obtain and employ backflow prevention assembly test equipment which has been evaluated and approved by the Town. All test equipment shall be registered with the Town. All test equipment shall be checked for accuracy annually, calibrated if necessary and certified to the Town as to the calibration employing a method acceptable to the Town.

B. DEFINITIONS

1. Air gap (AG) The term "air gap" shall mean a physical separation between the free flowing discharge end of a water supply pipeline and an open or non pressure receiving vessel. An approved air gap shall be at least double the diameter of the supply pipe measured vertically above the overflow rim of the vessel in no case less than 1 inch (2.54 cm).
2. Atmospheric Type Vacuum Breaker (AVB) The term "atmospheric type vacuum breaker" (also known as the "non pressure type vacuum breaker") shall mean a device containing a float check, a check seat and an air inlet port. The flow of water into the body causes the float to close the air inlet port. When the flow of water stops the float forms a valve against back siphonage and at the same time opens the air port to allow air to enter and satisfy the vacuum. A shutoff valve immediately upstream may be an integral part of the device, an atmospheric vacuum breaker is designed to protect against a non health (isolation protection only) under a back siphonage condition only.
3. Auxiliary Water Supply. Any water supply on or available to the premises other than the purveyors approved public water supply will be considered as an auxiliary water supply. These waters may be contaminated or polluted or they may be objectionable and constitute as unacceptable water source over which the water purveyor does not have sanitary control.
4. Backflow. The term "backflow" shall mean an assembly used to prevent backflow into a consumer or public potable water system. The type of assembly used should be based on the degree of hazard either existing or potential (as defined herein). They types are:
 - a. Double-Check valve assembly (DCVA)
 - b. Double-Check Detector Assembly (Fire System) (DCDA)
 - c. Pressure Vacuum Break (PVB)
 - d. Reduced Pressure Principle Assembly (RP)
 - e. Reduced Pressure Principle-Detector Assembly (Fire System) (RPDA)
5. Certified Backflow Prevention Assembly Tester. The term "Certified Backflow Prevention Assembly Tester" (Tester) shall mean a person who has proven their competency to the satisfaction of the County. Each person who is certified to make competent tests, or to repair, overhaul, and make reports on backflow on backflow

prevention assemblies shall be knowledgeable of applicable laws, rules and regulations, shall be a licensed plumber or have at least two (2) years experience under and be employed by a North Carolina licensed plumber or plumbing contractor, or have equivalent qualifications acceptable to the Town and must hold a valid "certificate of completion" from an approved training program in the testing and repair of backflow prevention assemblies recognized by the Town.

6. Backpressure. The term "backpressure" shall mean any elevation of pressure in the downstream piping system (by pump, elevation of piping, or stream and/or air pressure) above the supply pressure at the point of consideration (delivery) which would cause, tend to cause, a reversal of the normal direction of flow.
7. Backsiphonage. The term "backsiphonage" shall mean a reversal of the normal direction of flow in the pipeline due to a reduction in system pressure which causes a sub atmospheric pressure to exist at a site in the water system.
8. Approved Check Valve. The term "approved check valve" shall mean a check valve that is drip-tight in the normal direction of flow when the inlet pressure is at least one (1) psi and the outlet pressure is zero (0).
9. The check valve shall permit no leakage in a direction reversed to the normal flow. The closure element (e.g. clapper poppet, or other design) shall be internally loaded to promote rapid and positive closure. **An approved Check valve is only one component of an approved backflow prevention assembly-** i.e., pressure vacuum breaker, double-check valve assembly, double-check detector assembly, reduced pressure principle assembly, or reduced pressure principle detector assembly. These devices must have met the design performance standards of the American Society of Sanitary Engineers (ASSE), the American Water Works Association (AWWA), or the Foundation for Cross Connection Control and the Hydraulic Research of the University of Southern California and approved by the Town.
10. Consumer. The Term "consumer" shall mean any person, firm or corporation using or receiving water from the Town.
11. Consumer's Water System. The term "consumer's water system shall include any water system commencing at the point of delivery and continuing throughout the consumer's plumbing system located on the consumer's premises, whether supplied by the public potable water or an auxiliary water supply. The system may be either a potable water system or an industrial piping system.
12. Consumer's Potable Water System. The term "consumer's potable water system shall mean that portion of the privately owned potable water system lying between the point of delivery and the point of use and/or isolation protection. The system will include all pipes, conduits, tanks, receptacles, fixtures, equipment, and appurtenances used to produce, convey, store, or use potable water.

13. Containment. The term "containment" shall mean preventing the impairment of the public potable water supply by installing an approved backflow prevention assembly at the service connection.
14. Contamination. The term "contamination" shall mean an impairment of the quality of the water which creates a potential or actual hazard to the public health through the introduction of hazardous or toxic substances or waterborne health hazards in the form of physical or chemical contaminants or biological organisms and pathogens.
15. Cross-Connection. The term "cross-connection" shall mean any unprotected actual or potential connection or structural arrangement between a public or a consumer's water system and any other source or system through which it is possible to introduce any contamination or pollution, other than the intended potable water with which the system is supplied. Bypass arrangements, jumper connections, removable sections, swivel or changeover devices and other temporary or permanent devices through which or because of which "backflow" can or may occur are considered to be cross-connections.
16. Double-Check Valve Assembly (DCVA). The term "double-check valve assembly" shall mean an assembly composed of two (2) independently acting, approved check valves, including tightly closing shut-off valves attached at each end of the assembly and fitted with properly located test cocks. The assembly shall only be used to protect against a non-health hazard (i.e., pollutant). Device must be approved by Foundation for Cross-Connection Control and Hydraulic Research.
17. Double-Check Detector Assembly (DCDA). The term "double-check detector assembly" shall mean a specially designed assembly composed of a line-size approved double-check valve assembly with a specific bypass water meter and a meter-sized approved double-check valve assembly. The meter shall register (in U.S. gallons) accurately for very low rates of flow and shall show a registration for all rates of flow. This assembly shall only be used to protect against a non-health hazard (i.e., pollutant). Device must be approved by Foundation for Cross-Connection Control and Hydraulic Research.
18. Degree of Hazard. The term "degree of hazard" shall be derived from the evaluation of conditions within a system which can be classified as either a "pollutional" (non-health) or a contamination (health) hazard.
19. Health Hazard. The term "health hazard" shall mean an actual or potential threat of contamination of a physical, chemical, biological, pathogenic or toxic nature to the public of consumer's potable water system to such a degree or intensity that there would be a danger to health. Examples of waterborne health hazards include but are not limited to:
 - a. Physical-radioisotopes/radionuclides

- b. Chemical-lead, mercury and other heavy metals, organic compounds, other toxins and hazardous substances.
 - c. Biological-microorganisms and pathogens like cryptosporidium, typhoid, cholera and E. Coli.
20. Non-Health Hazard. The term "non-health hazard" shall mean an actual or potential threat to the quality of the public or the consumer's water system. A non-health is one that, if introduced into the public water supply system could be a nuisance to water customers but would not adversely affect human health.
21. Pollutional Hazard. The term "pollutional hazard" shall mean an actual or potential threat to the quality or the potability of the public or the consumer's water system but which would not constitute a health or system hazard, as defined. The maximum degree or intensity of pollution to which the potable water system could be degraded under this definition would cause a nuisance or be aesthetically objectionable or could cause minor damage to the system or its appurtenances.
22. Health Agency. The term "health agency" shall mean the North Carolina Department of Environmental and Natural Resources.
23. Industrial Fluids. The term "industrial fluids" shall mean any fluid or solution which may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration such as would constitute a health, or non-health hazard if introduced into a public or consumer potable water system. Such fluids may include but are not limited to: process waters, chemicals in fluid form, acids and alkalis, oils, gases, etc.
24. Industrial Piping System. The term "industrial piping system" shall mean a system used by the consumer for transmission, conveyance, or storage of any fluid, solid or gaseous substance other than an approved water supply. Such a system would include all pipes, conduits, tanks, receptacles, fixtures, equipment and appurtenances used to produce, convey, or store substances which are or may be polluted or contaminated.
25. Isolation. The term "isolation" is the act of confining a localized hazard within a consumer's water system by installing approved backflow prevention assemblies.
Disclaimer: The Town may make recommendations, upon facility inspection, as to the usages of isolation devices/assemblies, but does not assume or have responsibility whatsoever for such installations.
26. Point of Delivery. The term "point of delivery" shall generally be at the back side of the meter, where the meter or backflow prevention assembly (non-metered fire systems) is located. The consumer shall be responsible for all water piping and control devices located on the consumer's side of the point of delivery.
27. Pollution. The term "pollution" shall mean an impairment of the quality of the water to a degree which does not create an actual hazard to the public health but which does

adversely and unreasonably affect the aesthetic qualities of such water for domestic use.

28. Potable Water. The term "potable water" shall mean water from any source which has been approved for human consumption by the North Carolina Department of Environment and Natural Resources (NCDENR).
29. Public Potable Water System. The term "public potable water system" shall mean any publicly or privately owned water system operated as a public utility, under a current NCDENR permit, to supply water for public consumption or use. This system will include all sources, facilities and appurtenances between the source and the point of delivery such as valves, pumps, pipes, conduits, tanks, receptacles, fixtures, equipment and appurtenances used to convey, treat, or store potable water for public consumption or use.
30. Reduced Pressure Principle Backflow Prevention Assembly (RP) The term "reduced pressure principle backflow prevention assembly" shall mean an assembly containing within its structure a minimum of two (2) independently acting approved check valves, together with a hydraulically operating mechanically independent, pressure differential relief valve located between the check valves and at the same time below the first check valve. The first check valve reduces the supply pressure to a predetermined amount so that during normal flow and at cessation of normal flow, the pressure between the checks shall be less than the supply pressure. In case of leakage of either check valve, the pressure differential relief valve, by discharging to atmosphere, shall operate to maintain the pressure between the check less than the supply pressure. The unit shall include tightly closing valves located at each end of the assembly and each assembly shall be fitted with properly located test cocks. The assembly is designed to protect against a health hazard (i.e., contaminant) or a non-health (i.e., pollutant). Device must be approved by Foundation for Cross-Connection Control and Hydraulic Research.
31. Reduced Pressure Principle-Detector Assembly (RPDA). The term "reduced pressure principle-detector assembly" shall mean a specially designed assembly composed of a line-size approved reduced pressure principle backflow prevention assembly with a specific bypass water meter and a meter-sized approved reduced pressure principle backflow prevention assembly. The meter shall register (in U.S. gallons) accurately for very low rates of flow and shall show a registration for all rates of flow. This assembly shall be used to protect against a health hazard (i.e., containment) or a non-health (i.e., pollutant). Device must be approved by Foundation for Cross-Connection Control and Hydraulic Research.
32. Service Connections. The term "service connections" shall mean the terminal end of a service connection from the public potable water system, i.e., where the Town loses

jurisdiction and control over the water at its point of delivery to the consumer's water system.

33. Pressure Vacuum Breaker (PVB). The term "pressure vacuum breaker" shall mean an assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located in the discharge side of the check valve. The assembly is to be equipped with properly located test cocks and tightly closing shutoff valves attached at each end of the assembly. The assembly is designed to protect against a health hazard (i.e., containment under a back-siphonage condition only. Device must be approved by Foundation for Cross-Connection Control and Hydraulic Research.
34. Water Purveyor. The term "water purveyor" shall mean the owner, operator or grantor of authority to operate a public potable water system providing an approved water supply to the public.
35. Unapproved Water Supply. The term "unapproved water supply" shall mean a water supply which has not been approved for human consumption by the NCDENR.
36. Used Water. The term "used water" shall mean any water supplied by a water purveyor from a public water system to a consumer's water system after it has passed through the point of delivery and is no longer under the control of the water purveyor.

C. RIGHT OF ENTRY

1. Upon presentation of proper credentials and identification, authorized representatives from the Town shall have the right to enter any building, structure, or premises during normal business hours, or at any time during the event of an emergency to perform any duty imposed by this Ordinance. Those duties may include sampling and testing of water, or inspections and observations of all piping systems connected to the public water supply. Where a consumer has security measures in force which would require proper identification and clearance before entry into their premises, the consumer shall make necessary arrangements with the security guard so that upon presentation of suitable identification, Town personnel will be permitted to enter without delay for the purpose of performing specific responsibilities. Refusal to allow entry for these purposes may result in discontinuance of water service.
2. On request, the consumer shall furnish to the Town any pertinent information regarding the water supply system on such property where cross-connections and backflow are deemed possible.

D. ELIMINATION OF CROSS-CONNECTIONS: DEGREE OF HAZARD

1. When cross-connections are found to exist, the owner, his/her agent, occupant, or tenant will be notified in writing to disconnect the same within the time limit established by the Town. The degree of protection required and maximum time

allowed for compliance will be based upon the potential degree of hazard to the public water supply system.

2. IF, in the judgment of the Town, an imminent health hazard exists, water service to the building or premises where a cross-connection exists may be terminated unless an air gap is immediately provided, or the cross-connection is immediately eliminated.
3. Cross-connections with private wells or other auxiliary water supplies require immediate disconnection.
4. All facilities that pose a potential health hazard to the potable water system must have a reduced pressure principle backflow prevention assembly within sixty (60) days of notification by the Town.
5. All industrial and commercial facilities not identified as a "health hazard" shall be considered non-health hazard facilities. All non-health hazard facilities must install a double-check valve assembly within ninety (90) days of notification by the Town.
6. Water mains served by the Town, but not maintained by the Town, shall be considered cross-connections, with degree of hazard to be determined by the Town. Degree of protection shall be based upon the degrees of hazard, as determined by the Town.
7. In the event that the Town Cross Connection Control Representative does not have sufficient access to every portion of a private water system (i.e., classified research and development facilities; Federal government property) to allow a complete evaluation of the degree of hazard associated with such private water systems, an approved reduced pressure principle backflow prevention assembly shall be required as a minimum protection.
8. No person shall fill special use tanks or tankers containing pesticides, fertilizers, other toxic chemicals or their residues from the public water system except at a Town approved location equipped with an air gap or an approved reduced pressure principle backflow prevention assembly properly installed on the public water system.

E. INSTALLATION OF ASSEMBLIES

1. All backflow prevention assemblies shall be installed in accordance with the specifications furnished by the Town and the manufacturer's installation instructions and/or in the latest edition of the North Carolina Building Code (particularly Table 608.1 of the NC. Plumbing Code), whichever is most restrictive.
2. All new construction plans and specifications, when required by the North Carolina Building Code and the North Carolina Division of Environment Health, shall be made available to the Town for review and approval and to determine the degree of hazard.

3. Ownership, testing and maintenance of the assembly shall be the responsibility of the consumer.
4. All double-check valve assemblies must be installed in drainable pits wherever below ground installation is necessary, in accordance with detailed specifications provided by the Town. Double-check valve assemblies may be installed in a vertical position with prior approval from the Town, provided the flow of water is in an upward direction.
5. Reduced pressure principle backflow prevention assemblies must be installed in a horizontal position (unless specifically designed for vertical installation) and in a location in which no portion of the assembly can become submerged in any substance under any circumstance. Pit and/or below grade installations are prohibited.
6. The installation of any backflow prevention assembly which is not approved by the Town must be replaced by one which is approved.
7. The consumer shall make sure all backflow prevention assemblies are working properly upon installation and must furnish the following information to the Town within fifteen (15) days after a reduced pressure principle backflow preventer (RP), double-check valve assembly (DCVA), pressure vacuum breaker (PVB), double-check detector assembly (DCDA), or reduced pressure principle detector assembly (RPDA) is installed
 - a. Service address where assembly is located.
 - b. Owner (and address, if different from service address).
 - c. Description of assembly location.
 - d. Date of installation.
 - e. Installer (include name, plumbing company represented, plumber's license number)
 - f. Type of assembly and size of assembly.
 - g. Manufacturer, model number, serial number.
 - h. Test results/report.
8. When it is not possible to interrupt water service, provisions shall be made for a "parallel installation" of backflow prevention assemblies. The Town will not accept an unprotected bypass around a backflow preventer. Bypass lines will have at least the same degree of protection as the back flow preventer being bypassed.
9. Upon notification by the Town, the consumer shall install the appropriate containment assembly not to exceed the following time frame:

Health Hazard.....sixty (60) days

Non-Health Hazard.....ninety (90) days

10. Following installation, all RP, DCVA, PVB, DCDA and RPDA are required to be tested by a Certified Backflow Prevention Assembly Tester within ten (10) days.

F. TESTING AND REPAIR OF ASSEMBLIES

1. Testing of backflow prevention assemblies shall be made by a Certified Backflow Prevention Assembly Tester approved by the Town. Such tests are to be conducted upon installation and annually thereafter, or at a frequency established by the Town. A record of all testing repairs is to be retained by the consumer for a minimum of three (3) years. Copies of the records must be provided to the Town within ten (10) business days after the completion of any testing and repair work.
2. Any time that repairs to backflow prevention assemblies are deemed necessary, whether through annual or required testing, routine inspection by the consumer, or by the Town, such repairs must be completed within a specified time in accordance with the degree of hazard. In no case shall this time period exceed:

Health Hazard Facilities..... seven (7) days

Non-Health Hazard Facilities twenty-one (21) days

3. All backflow prevention assemblies with test cocks are required to be tested annually or at a frequency established by the Town.
4. All Certified Backflow Prevention Assembly Testers must obtain and employ backflow prevention assembly test equipment which has been evaluated and approved by the Town. All test equipment shall be registered with the Town. All test equipment shall be checked for accuracy annually, calibrated if necessary and certified to the Town as to the calibration employing a method acceptable to the Town (See Section A(3)e) above)
5. It shall be unlawful for any consumer or certified backflow prevention assembly tester to submit any record to the Town that is false or incomplete in any respect. It shall be unlawful for any consumer or certified tester to fail to submit to the Town any record which is required by this Ordinance. Such violations may result in the enforcement action out lined in Section J of this Ordinance.

G. FACILITIES REQUIRING PROTECTION

Approved backflow prevention assemblies shall be installed on the service line to any facility that the Town has identified as having a potential for backflow.

The following types of facilities or services have been identified by the Town as having a potential for backflow of non-potable water into the public water supply system. Therefore,

an approved backflow prevention assembly may be required on all such services according to the degree of hazard present. Other types of facilities or services not listed below may also be required to install approved backflow prevention assemblies if determined necessary by the Town. As a minimum requirement, all commercial services will be required to install a double-check valve assembly, unless otherwise listed below.

Abbreviations:

DCVA = Double-Check Valve Assembly

RP = Reduced Pressure Principle Assembly

DCDA = Double-Check Detector Assembly

RPDA = Reduced Pressure Detector Assembly

AG = Air Gap

PVB = Pressure Vacuum Breaker

1. Automotive Service Stations, Dealerships, etc.
 - a. No Health Hazard: DCVA
 - b. Health Hazard: RP
2. Auxiliary Water System:
 - a. Approved Public/Private Water System: DCVA
 - b. Unapproved Public/Private Water System: AG
 - c. Used Water and Industrial Fluids: RP
3. Bakeries
 - a. No Health Hazard: DCVA
 - b. Health Hazard: RP
4. Beauty Shops/Barber Shops
 - a. No Health Hazard: DCVA
 - b. Health Hazard: RP
5. Beverage Bottling Plants: RP
6. Breweries: RP
7. Buildings – Hotels, apartment houses, public and private buildings or other structures having unprotected cross-connections.
 - a. (Under five stories) No Health Hazard: DCVA
 - b. (Under five stories) Health Hazard: RP
 - c. (Over five stories) All: RP
8. Canneries, packing houses and rendering plants: RP

9. Chemical plants – Manufacturing, processing, compounding or treatment: RP
10. Chemically contaminated water systems: RP
11. Commercial carwash facilities: RP
12. Commercial greenhouses: RP
13. Commercial sales establishments (department stores, malls, etc.)
 - a. No Health Hazard: DCVA
 - b. Health Hazard: RP
14. Concrete/asphalt plants: RP
15. Dairies and cold storage plants: RP
16. Dye works: RP
17. Film laboratories: RP
18. Fire systems ¾ (inch) to 2" (inch): RP
19. Fire systems 2 ½" (inch) to 10" (inch): RP
20. Fire Trucks: RP
21. Hospitals, medical buildings sanitariums, morgues, mortuaries, autopsy facilities, nursing and convalescent homes, medical clinics and veterinary hospitals: RP
22. Industrial facilities:
 - a. No Health Hazard: DCVA
 - b. Health Hazard: RP
23. Laundries:
 - a. No Health Hazard: DCVA
 - b. Health Hazard: (i.e., Dry Cleaners): RP
24. Lawn irrigation systems (split taps):
 - a. No Health Hazard: DCVA
 - b. Health Hazard: (Booster Pumps, Chemical Systems): RP
25. Metal manufacturing, cleaning, processing and fabrication – plants: RP
26. Mobile home parks:
 - a. No Health Hazard: DCVA
 - b. Health Hazard: RP
27. Nail Salons: RP
28. Oil and gas production, storage or transmission properties: RP
29. Pest control (extermination and fumigating): RP
30. Power plants: RP
31. Radioactive materials of substance-plants or handling facilities: RP
32. Residential:
 - a. No Health Hazard: DCVA
 - b. Health Hazard: RP
33. Restaurants:

- a. No Health Hazard: DCVA
- b. Health Hazard: RP
- 34. Restricted, classified, or other closed facilities: RP
- 35. Sand and gravel plants: RP
- 36. Schools and colleges: RP
- 37. Sewage and storm drain facilities: RP
- 38. Swimming Pools: RP
- 39. Water facilities and industries: RP

All assemblies and installations shall be subject to inspection and approval by the Town.

H. CONNECTIONS WITH UNAPPROVED SOURCES OF SUPPLY

- 1. No person shall connect or cause to be connected any supply of water not approved by the NCDENR to the water system supplied by the Town. Any connections allowed by the Town must be in conformance with the backflow prevention requirements of this Ordinance.
- 2. In the event of contamination or pollution of a public or consumer's potable water system, the consumer shall notify the Town immediately in order that appropriate measures may be taken to overcome and eliminate the contamination or pollution.

I. FIRE PROTECTION SYSTEMS

- 1. All connections for fire protection systems connected with the public water system 2" and smaller shall be protected with an approved RP assembly as a minimum requirement. All fire systems using toxic additive or booster pumps shall be protected by an approved RP assembly at the main service connection.
- 2. All connections for fire protection systems connected with the public water system greater than 2" shall be protected with an approved RP assembly as a minimum requirement. All fire protection systems using toxic or hazardous additives or booster pumps shall be protected by an approved RP assembly at the main service connection.
- 3. All existing backflow prevention assemblies 2 1/2" and larger installed on fire protection systems that were initially approved by the Town shall be allowed to remain on the premises, as long as they are being properly maintained, tested and repaired as required by this Ordinance. However, if the existing assembly must be replaced (once it can no longer be repaired), or in the event of proven water theft through an un-metered source, the consumer shall be required to install an approved RP assembly as required by this provision.

J. ENFORCEMENTS

- 1. The consumer or person in charge of any installation found not to be in compliance with the provisions of this Ordinance shall be notified in writing with regard to the corrective action(s) to be taken.

2. Such notice must explain the violation and give the time period within which the violation must be corrected. The time period set to correct a violation shall not exceed thirty (30) days after receiving notice unless otherwise specified by Section D. If the violation has been determined by the Town to be an imminent hazard the service will be disconnected and the consumer shall be required to correct the violation Immediately.
3. In the event a consumer is found in violation of this Ordinance and fails to correct the violation in a timely manner or to pay any civil penalty or expense assessed under this section, water service may be terminated and shall be reestablished when the violation is corrected and any applicable civil penalties and re-connect fees are paid.
4. The violation of any section of this Ordinance may be punished by a civil penalty listed as followed:
 - a. Unprotected cross-connection involving a private water system which creates an imminent hazard-\$1,000.00 per day not to exceed \$10,000.00.
 - b. Unprotected cross-connection involving a private water system which is of a moderate or high hazard - \$500.00 per day not to exceed \$5,000.00.
 - c. If in the judgment of the Town any consumer, manager, supervisor, or person in charge of any installation is found to be in noncompliance with the provisions of this Ordinance and neglects their responsibility to correct a violation, water service will be discontinued. After the violation is corrected and re-connect fees have been paid, service will be restored.
 - d. Failure of a consumer or Certified Backflow Prevention Assembly Tester to submit any record required by the Ordinance, or the submission of falsified reports or records, may result in a civil penalty of up to \$500.00 per violation. If a Tester submits falsified records to the Town, the Town shall permanently revoke that Tester's privileges to test any backflow prevention assembly within the jurisdiction of the Town.
 - e. Failure of a consumer to test or maintain backflow prevention assemblies as required shall be subject to a civil penalty of \$200.00 per day.
5. Enforcement of this program shall be administered by the Director of Spruce Pine Public Works or the authorized representative of the Director.

Adopted this the th day of 2023
