

**WATER LINE MAINTENANCE AGREEMENT  
APPOMATTOX COUNTY & TOWN OF APPOMATTOX**

This agreement, made and entered into this 23 day of February, 2012 by and between Appomattox County, Virginia (herein referred to as the "County") party of the first part; and the Town of Appomattox, Virginia (herein referred to as the "Town") party of the second part.

**RECITALS**

1. Appomattox County and the Town of Appomattox collectively recognize that it is advantageous for both parties to work together when providing services to its respective citizens whenever possible. This not only provides continuity in the service delivery it also provides value to the citizens of both jurisdictions in that quality services can be provided in a cost effective manner.
2. The County is aware that the Town presently operates a municipal water system and as such has the utility expertise and equipment to maintain and service a waterworks infrastructure similar to that being constructed by the County along Route 460. The County shall provide public water service to current County customers as well as future properties from the West side of the Town to the Eastern side of Campbell County along Route 460 at Concord, Virginia.
3. Given the Town plans to connect to the County water system thereby becoming its primary customer (The details of which are set forth in a Water Purchase Contract dated September 12, 2011) and given the Town will become part of the overall system once it is completed, entering into a long term water system maintenance agreement with the Town will provide greater operating efficiencies thereby benefiting both parties. The purpose of this agreement as follows will be to provide the required maintenance of the Appomattox County waterworks and support structure.

February 17, 2012

## **ARTICLE I WATER LINE MAINTENANCE**

Section 1.1- The initial term of this agreement shall be for a period of five (5) years beginning on January 1, 2012, and ending on December 31, 2016, both dates inclusive. At the expiration of the original term of this agreement, the agreement shall renew upon the same terms without notice, for an additional five (5) year renewal term, and for subsequent five (5) year renewal terms thereafter, unless either party gives written notice to the other party at least six (6) months prior to the expiration of the original term or any renewal term of that party's intention to terminate the agreement at the end of the original term or any renewal term.

Section 1.2- During the term of this agreement, the Town agrees to operate and maintain the Appomattox County Waterworks using the same standard of care and expertise as it operates its own system and in accordance with the requirements of the Virginia Waterworks Regulations.

Section 1.3 – The Town hereby agrees to maintain the required inventory of spare parts to maintain the County waterworks line with the understanding that the County uses fittings, valves, hydrants, meters, meter bases/boxes, and other miscellaneous materials that are standard to the Town's existing waterworks inventory. Any material and/or item that is not standard to the Town's waterworks inventory would be part of a County maintained inventory and available to the Town as the needs arise.

Section 1.4 – The County agrees to pay the fully loaded hourly rate for all labor required in the performance of any maintenance activity performed by the Town related to the County waterworks. Rates for various maintenance personnel are provided in Appendix A. All rates listed would be applicable during the period from July 1 to June 30 of each County/Town fiscal year.

Section 1.5 – All equipment used in the performance of any maintenance activities related to the County water line would be billed at the rates shown in Appendix B of this agreement. Any equipment not listed in the Appendix

B would be considered as incidental to the maintenance activity required and not billable to the County.

Section 1.6 – All materials such as fittings, valves, hydrants, meters, pipe, etc. will be billed at cost to the County per the invoice.

Section 1.7 – The Town shall be responsible for providing services such as utility marking, water tank inspections and maintenance of the water tank, pump station and their respective grounds areas. These services shall be billed at the rates noted in Appendix A & B.

Section 1.8 – The Town shall maintain a contract for on-call contractual services and equipment that may be needed in the event of an emergency which goes beyond the capabilities of the Town maintenance crews and/or equipment. Invoices for such services and equipment would be billed at cost to the County.

Section 1.9 – Independent Contractor- The parties hereto agree that the Town is acting as an Independent Contractor in providing the goods and services set forth herein.

## **ARTICLE II-INSURANCE COVERAGE**

Section 2.1-During any term this Agreement is in effect, Town shall maintain such bodily injury and property damage liability insurance coverage as shall protect it and County from claims for damages for personal injury, including death, as well as claims for property damage, which may arise from its duties and activities under this Agreement. Such insurance shall be a General Liability policy with limits of five million dollars (\$5,000,000.00) and shall name the Board of Supervisors and County as Additional Insured.

Section 2.2-During any term this Agreement is in effect, County shall maintain such bodily injury and property damage liability insurance coverage as shall protect it and Town from claims for damages for personal injury, including death, as well as claims for property damage, which may arise because of County's ownership of the water lines which are the

subject of this Agreement. Such insurance shall be a General Liability policy with limits of five million dollars (\$5,000,000.00) and shall name Town Council and Town as Additional Insured.

Notwithstanding the above paragraph, in no event shall such coverage insure or protect Town Council or Town from said liability for damages which arise from Town's duties and activities under this Agreement. Should County's liability insurance carrier pay said damages on behalf of County, then said carrier shall have subrogation rights against Town for said payments.

Section 2.3- If the liability insurance purchased by either party has been issued on a "claims made" basis, the party must comply with the following additional conditions. The limits of liability and the extensions to be included as described previously in these provisions, remain the same.

The party must either:

1. Agree to provide certificates of insurance evidencing the above coverage for a period of two (2) years after final payment for the Agreement for General Liability policies. This certificate shall evidence a "retroactive date" no later than the beginning of the Town's work under this Agreement, or
2. Purchase the extended reporting period endorsement for the policy or policies in force during the term of this Agreement and evidence the purchase of this extended reporting period endorsement by means of a certificate of insurance or a copy of the endorsement itself.

Section 2.4-Each of the parties hereto shall provide the other with a Certificate of Insurance showing the required coverage to be in full force and effect and shall notify the other thirty (30) days in advance of termination of said policy.

## **ARTICLE III – BILLING**

Section 3.1 – Reading of the water meters and customer billing for the water used by County customers shall be the responsibility of the Town. One hundred percent (100%) of the user fees shall be received by the Town and reimbursed to the County on a monthly basis. The County shall compensate the Town for the customer billing, receipt of payments and other administrative cost related to the above noted activities in the amount of \$500.00 monthly, which amount may be renegotiated annually.

Section 3.2 – The Town shall be responsible for the administration/implementation of the County's Cross Connection Control Program. The fee for this service shall be \$100.00 monthly, which amount may be renegotiated annually.

## **ARTICLE IV VIRGINIA DEPARTMENT OF HEALTH OPERATING PERMIT AND WATER SAMPLE TESTING**

Section 4.1 – All monthly water sample collection and testing required by the permit issued by the Virginia Department of Health for the County waterworks line shall be the responsibility of the Town. All water sample testing shall be done by an approved testing laboratory. The Town shall be responsible for the selection of an approved testing laboratory and maintaining a valid contract for such services. All sample selection and chain of custody documents shall be the responsibility of a waterworks operator of the appropriate class for the waterworks as Licensed by the Virginia Department of Professional and Occupational regulation.

Section 4.2 – Water testing services to comply with sampling requirements of the Virginia Waterworks Regulations shall be paid for in full by Appomattox County.

Section 4.3 – The Town shall provide licensed Waterwork operators of the appropriate class required by the Virginia Waterworks Regulations to manage the County system to include the completion and submission of the monthly Virginia Department of Health operating report.

Section 4.4 – The County, with the execution of this agreement does hereby designate the Town as its agent to enforce the rules, regulations, and ordinances that govern the maintenance and use of the County's waterworks.

Section 4.5 – The County shall provide the Town with copies of its ordinance which provide the general rules and regulations for use of its waterworks (Appendix F) as well as its cross connection control program (Appendix G). The County shall provide future updates to these ordinances as they are enacted.

Section 4.6 – The County shall review their water rates annually and provide the Town with an approved rate schedule as a part of the annual update of this agreement. The Town agrees to provide technical assistance as needed to assist the County in their annual rate evaluation.

## **ARTICLE V**

### **SERVICE INSTALLATIONS AND FEES**

Section 5.1 – Installation and maintenance of water service connections and meters shall be the responsibility of the Town. New service connections shall be applied for and coordinated through the Town's Public Works Department. Service connections and availability fees shall be charged per a County approved fee schedule (Appendix H).

## **ARTICLE VI**

Section 6.1 - Subject to final approvals, this agreement shall be binding upon to and inure to the benefit of the future governing bodies of such jurisdictions and upon any successors to the Town and County.

Section 6.2 - This agreement may be amended, modified or supplemented, in whole or in part, by mutual consent of the Town and the County in a written document of equal formality and dignity, executed by duly authorized representatives of each jurisdiction.

February 17, 2012

Section 6.3 - In the event that any section, paragraph or provision of this Agreement be declared illegal or invalid or unconstitutional by final judgment of any court of competent jurisdiction, such judgment of invalidity shall not invalidate any other section, paragraph or provision hereof, and all parts of this Agreement would have been entered into by the parties without such invalid provision.

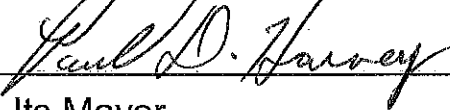
Section 6.4 - Execution of this agreement by both the County and the Town grants authority to enforce the Virginia Waterworks Regulations required by the joint permit as well as all inclusive responsibility to operate the County Waterworks to meet all operational requirements of the Commonwealth of Virginia Waterworks Regulations.

Section 6.5 – This agreement shall remain in force unless either party receives a written notice of termination as described in Article I, Section 1.1.

WITNESS TO FOLLOWING SIGNATURES AND SEALS

TOWN OF APPOMATTOX

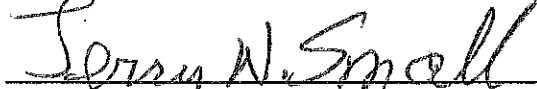
By



Its Mayor

APPOMATTOX COUNTY VIRGINIA

By



Chairman, Board of Supervisors

February 17, 2012

**APPENDIX A**  
 Personnel Rate Schedule  
 July, 2011-June, 2012

**Labor Costs**

|   | <i>Hourly</i> | <i>Fica</i> | <i>VRS</i>  | <i>Health</i>   |              |
|---|---------------|-------------|-------------|-----------------|--------------|
|   | <i>Rate</i>   | <i>per</i>  | <i>per</i>  | <i>per/hour</i> | <i>Total</i> |
|   |               | <i>hour</i> | <i>hour</i> |                 |              |
| <i>Utility Director</i>                 | 21.22         | 1.62        | 2.33        | 2.42            | 27.60        |
| <i>Utility Maintenance Supervisor</i>   | 15.04         | 1.15        | 1.65        | 2.42            | 20.26        |
| <i>Utility II</i>                       | 12.97         | 0.99        | 1.43        | 2.42            | 17.81        |
| <i>Utility I</i>                        | 11.14         | 0.85        | 1.23        | 2.42            | 15.64        |
| <i>W &amp; S Maintenance Supervisor</i> | 18.37         | 1.41        | 2.02        | 2.42            | 24.22        |
| <i>Utility II</i>                       | 12.97         | 0.99        | 1.43        | 2.42            | 17.81        |
| <i>P/T Utility I</i>                    | <u>9.00</u>   | <u>0.69</u> |             |                 | <u>9.69</u>  |
|   | 100.71        | 7.70        | 10.09       | 14.52           | 133.02       |
| <i>Hourly Labor Cost</i>                |               |             |             |                 | 19.00        |

February 17, 2012

**APPENDIX B**  
**Equipment Rate Schedule**

| <b>Equipment Description</b> | <b>Cost per hour</b> |
|------------------------------|----------------------|
| 410 D Backhoe                | 25.29                |
| 410 J Backhoe                | 25.29                |
| Case Tractor                 | 24.25                |
| Equipment Trailer            | 11.20                |
| 2011 Chevy Pick-up           | 4.76                 |
| 2008 Chevy Pickup            | 4.76                 |
| 2008 Dogdge Pickup           | 4.76                 |
| 2007 Chevy Pickup            | 4.76                 |
| 1990 Chevy Pickup            | 3.62                 |
| 2011 Ford Pick-up            | 5.02                 |
| Air Compressor               | 11.98                |
| International Dump Truck     | 14.80                |
| International Dump Truck     | 14.80                |
| Gmc Dump Truck               | 14.80                |
| Flag Trailer                 | 5.39                 |

\*Does not include an operator

February 17, 2012

## **APPENDIX C**

### **Water Restrictions**

#### **Section 1. Authority to declare water emergencies.**

A. During the continued existence of climatic, hydrological and other extraordinary conditions, the protection of the health, safety, and welfare of the residents of the County may require that certain uses of water, not essential to public health, safety and welfare be reduced, restricted or curtailed. As the shortage of potable water becomes increasingly more critical, conservation measures to reduce consumption or curtail essential water use may be necessary.

B. The Town, with the approval of the County, is authorized to declare water emergencies in the County affecting the use of water in any area of the County and to control and restrict the use of water during an emergency caused by a water shortage or other cause.

#### **Section 2. Publication of declaration.**

Upon the declaration of a water emergency pursuant to Subsection 1, the Town shall immediately post a written notice of the emergency at the front door of the County office, in a newspaper of general circulation in the area, announce on television and radio, and use any other appropriate means of communication.

#### **Section 3. Use of water restricted.**

A. Upon the declaration of a water emergency pursuant to Subsection 1, the Town is authorized and directed to implement conservation measures by ordering the restricted use or absolute curtailment of the use of water for certain nonessential purposes for the duration of the water shortage in the manner hereinafter set out. In exercising this discretionary authority, and making the determinations set forth in Subsection 5 thereof, the Town shall give due consideration to water levels, available/usable storage on hand, draw down rates and the projected supply capability in water sources in the County, supply capacity, daily water consumption and consumption projections of the system's customers prevailing and forecast weather conditions; fire service requirements; pipeline conditions including breakages, stoppages and leaks; estimates of minimum essential supplies to preserve public health and safety

and such other data pertinent to the past, current and projected water demands.

B. All data collected and considered by the Town shall be reduced to writing and maintained by the Town.

#### **Section 4. Limitation of restrictions.**

The provisions of this section, or regulations promulgated hereunder the Town, which are hereby authorized, shall not apply to any governmental activity, institution, business or industry which shall be declared by the Town, upon a proper showing, to be necessary for the public health, safety and welfare or the prevention of severe economic hardship or the substantial loss of employment. Any activity, institution, business or industry aggrieved by the finding of the Town may appeal that decision to a water conservation appeals board appointed by the County consisting of three members selected as follows: a single representative from the Virginia Department of Health (VDH) department of engineering, and two citizens from the public at large.

#### **Section 5. Water conservation measures.**

A. Upon a determination by the Town of the existence of the following conditions, the Town shall take the following actions; which shall apply to any person whose water supply is furnished by the County water system:

(1) Condition 1: Normal Operations, with up to 75% of time flow is equaled or exceeded. No restriction imposed.

(2) Condition 2: Drought Watch, with up to 75% to 90% of time flow is equaled or exceeded. Voluntary restrictions imposed.

(3) Condition 3: Drought Warning, with up to 90% to 95% of time flow is equaled or exceeded. Partial mandatory restrictions imposed.

(4) Condition 4: Drought Emergency, with up to 95% of time flow is equaled or exceeded. Mandatory restrictions imposed.

B. The determination of Conditions 2, 3 and 4 by the Town shall be accomplished by a written report which shall set out the criteria utilized and data relied upon in making such determination, including a narrative summary supporting the determination. Each report shall be available for public

inspection in the Town office. The Town shall forthwith transmit a copy of each report to the County.

#### **Section 6. Violations and penalties.**

Any person who shall violate any of the provisions of this article, or any of the conservation regulations promulgated by the Town pursuant thereto, shall, upon conviction thereof, in addition to additional charges set forth in Section 5 be fined not less than \$100, nor more than \$2,500. Each act or each day's continuation of a violation shall be considered a separate offense. In addition to the foregoing, the Town may suspend water service to any person continuing to violate the provisions of this article or the regulations promulgated thereunder. If such water service is terminated, the person shall pay a reconnection fee and all outstanding charges before service is restored.

#### **Section 7. Notification of end of water emergency.**

The Town shall notify the County when, in its opinion, the water emergency situation no longer exists. Upon concurrence of the County, the water emergency shall be declared to have ended.

**APPENDIX D**  
**General Penalty**

**Section 1. Violations and penalties; application of mandatory penalties under state law; continuing violations.**

A. The authorized punishments for conviction of a misdemeanor are:

(1) For class 1 misdemeanors, confinement in jail for not more than 12 months and a fine of not more than \$2,500, either or both.

(2) For class 2 misdemeanors, confinement in jail for not more than six months and a fine of not more than \$1,000, either or both.

(3) For class 3 misdemeanors, a fine of not more than \$500.

(4) For class 4 misdemeanors, a fine of not more than \$250.

B. Wherever in this Code or in any other ordinance or resolution of the Town or rule or regulation promulgated by an officer or agency of the Town, under authority vested in him or it, any act is prohibited or is made or declared to be unlawful or an offense or misdemeanor, or the doing of any act is required, or the failure to do any act is declared to be unlawful or an offense or misdemeanor, where no specific penalty is provided therefor, the violation of any such provision of this Code, any ordinance, resolution, rule or regulation shall be a class 1 misdemeanor; provided, that such penalty shall not exceed the penalty provided by the Code of Virginia for a like offense.

C. If the penalty provided in Subsection B of this section is in conflict with any mandatory penalty for a similar offense under the laws and statutes of the state, the penalty provided by the laws and statutes of the state shall be enforced and not the penalty provided in Subsection B.

D. Each day any violation of this Code or of any other such ordinance, resolution, rule or regulation of the Town shall continue shall constitute a separate offense, except where otherwise provided.

**APPENDIX E – WATER RATES**

**TOWN OF APPOMATTOX  
WATER AND SEWER POLICY  
TO INCLUDE  
USER CHARGES  
CONNECTION AND AVAILABILITY FEE  
ADMINISTRATIVE POLICY**

February 17, 2012

**A. User Rates - Billing Period: Monthly**

**Rates effective July 1, 2010**

In-Town & Out of Town

| <u>Water</u>  | <u>Base Rate</u> | <u>Incremental Rate</u>                                      |
|---|------------------|--|
| <b>\$4.00 per month per user for Capital Replacement</b>        |                  | <b>\$5.80/1000 gallons for all consumption</b>               |
| <b>\$9.10/month per Equivalent Residential Connection (ERC)</b> |                  | <b>\$8.25/1000 gallons for all metered water consumption</b> |

Notes: 1. Billing Period - Monthly

2. Equivalent Residential Connections (ERC) computed on the basis of 4400 gallons of water purchased per month equal to one (1) ERC. Equivalent Residential Connections (ECR) computed on an annual basis and applied during the budget or fiscal period. Unless there is a measured 15% change (increase or decrease) in water purchased.

B. Connection Fees: Connection fees are defined as a charge designed to cover the cost of making the connection.

Water

- Standard ¾" water connection with water main located on same side of the road as the residents \$1,200.00.

- For connection larger than ¾", and require installing service line across any primary or secondary roads, cost of connection shall be at cost of materials and labor.

Sewer

- Standard residential connection with sewer main located on the same side of the as the residents \$1,900.

- For connection larger than the standard, and or installing service line across any primary or secondary roads, cost of connection shall be at cost of materials and labor.

**C. Water and Sewer Facilities - Availability Fees**

The purpose of the availability fees is to defray the continuing cost of providing water treatment, transmission mains, pumping stations, storage facilities, sewage treatment, sewer collection, and other capital items.

The charge for availability fee for water and sewer service shall be made for each new service in accord with the following schedule.

|   | <u>WATER</u> | <u>SEWER</u> |
|---|--------------|--------------|
| 1. Single Family Dwelling   | \$1200.00    | \$1900.00    |
| 2. Multi-Family, per family unit<br>(Duplexes, condominiums, town-<br>houses, apartments & mobile homes)<br>*Per family unit is considered separately | \$1200.00    | \$1900.00    |
| 3. Motel (per unit or room)<br>(excluding on-site laundry)  | \$300.00     | \$500.00     |
| 4. Restaurants (per seat)   | \$100.00     | \$200.00     |
| 5. Laundromats (per machine)  | \$900.00     | \$1200.00    |
| 6. Nursing Homes (per bed)  | \$400.00     | \$500.00     |
| 7. Homes for the age (per bed)  | \$300.00     | \$400.00     |
| 8. Hospitals (per bed)  | \$600.00     | \$900.00     |
| 9. Doctor's Office (per patient bed)  | \$400.00     | \$500.00     |
| 10. Theaters, drive in type (per car)   | \$40.00      | \$50.00      |
| 11. Theaters, auditorium type (per seat)  | \$40.00      | \$50.00      |
| 12. Picnic areas (per person<br>& park capacity)  | \$40.00      | \$50.00      |
| 13. Camps, resorts, overnight (per site)  | \$40.00      | \$50.00      |
| 14. Luxury camps with flush toilets<br>(per camp site)  | \$200.00     | \$300.00     |
| 15. Any proposed use not covered above or in cases where a higher<br>factor, hardship or community waiver is recommended by Staff, the Town           |              |              |

Council shall make the final decision based upon written application with supporting data.

Availability charges for any water or sewage use not classified above shall be based on an equivalent residential use (ERU) determination by the Town Manager. Each ERU determined shall be assessed a charge of \$1200.00 per ERU for water and/or \$1900.00 respectively. The ERU determination shall be based on the building or premise water use for existing users, and on projected use or discharges for new users. Projected use or discharges shall be estimated utilizing design analysis and/or records of similar uses. All projected ERU determinations discharge to determine the accuracy of the ERU determination. If the ERU determination was high, the Town will refund the availability fee overpayment. Should any building use change placing a greater demand on the water or sewer system, additional availability fees may be assessed by the Manager based on the additional demand, with full credit given for availability fees already paid.

D. Account Charge - \$10.00

The purpose of this charge is to defray the cost incurred in establishing the new customer account.

E. Deposits

The Town of Appomattox is authorized to require the following deposits from persons opening new water and/or sewer accounts:

|   | <u>In-Town</u> | <u>Out-of-Town</u> |
|---|----------------|--------------------|
| a. Residential Customers                            | \$100.00       | \$100.00           |
| b. Business, commercial and institutional customers |                |                    |
| (1) with 3/4" meter connections                     | \$ 100.00      | \$100.00           |
| (2) with 1" meter connections                       | \$ 100.00      | \$150.00           |
| c. Commercial customers                             | \$ 200.00      | \$300.00           |

The Town may also in its discretion, require additional deposit if the size of the service warrants. Deposit is to offset one two months average charge which may become delinquent. At such time as water and/or sewer service is discontinued, the deposit shall be returned to the person making the deposit. Any deposit not claimed after one (1) year after the depositor ceased to use Town water and/or sewer service shall be deemed abandoned by the depositor and shall not be subject to reclamation. When the person opening a new account owns the property to be supplied with water or sewer, the Town may not require a deposit.

- F. Billing Policy - All bills are due and payable upon receipt. If not paid twenty (20) days, a penalty in the amount of 10% of the bill will be added. If the bill and penalty are not paid within ten (10) days of the penalty date, service will be discontinued. If service is requested during the next ten (10) days period, a reconnection charge of \$50.00 and the past due bill and penalty must be paid prior to service being restored. When restoration of service is then requested,

the past due bill, penalty and reconnection charge (availability charge) will be due before service is restored.

- G. Unauthorized Connections/Cross-Connections - The connection for any other water supply to the Town's system is strictly prohibited. See Cross-Connection Control Policy.

Cross-Connections of a private or an auxiliary water system to the Town's public water system is restricted according to the WATERWORKS REGULATIONS FOR PUBLIC DRINKING WATER SUPPLY as adopted by the Commonwealth of Virginia Department of Public Health.

- H. Use of Service - The new service applicant is expected to begin use of water within thirty (30) days from the date of which such service is made available. Therefore, billing will commence at the end of this thirty-day period in accordance with prescribed rates, terms and conditions.
- I. The Town of Appomattox reserves the right to review each request or service and evaluate both the requested service requirements and available system well and storage capacity. Appropriate management of available system resources will be exercised by the Town Council with respect to new connections.
- J. The Town of Appomattox reserves the right to institute any and all measures deemed necessary in the event of a natural disaster, emergency, drought or other conditions which impacts on the water system. All measures considered will be as reasonable as possible. Generally residential customer service, although it may be curtailed, will be given highest service priority.

Availability fees to be determined on the basis of equivalent residential connections and the equivalent residential availability charge.

## **APPENDIX F**

### **APPOMATTOX COUNTY CHAPTER 142 WATERWORKS**

**Adopted by the Board of Supervisors, December 5, 2011**

#### **ARTICLE I General Provisions**

##### **Intent**

The rules and regulations set out in these articles shall be a part of the contract with every person supplied with water through the County's waterworks system, and every person by taking water shall be bound thereby.

##### **Assignment**

The Appomattox County Board of Supervisors may by resolution or separate agreement, assign to any person or entity found to be qualified, the right and authority to serve as its agent in the execution of duties, functions, rules and regulations as they relate to the operation of the County's waterworks system.

##### **Section 1 – Definitions.**

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

**AIR GAP SEPARATION** - The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying pure water to a tank, plumbing fixture or other device and the rim of the receptacle.

**AUXILIARY WATER SYSTEM** - Any water system on or available to the premises other than the waterworks. These auxiliary waters may include water from another purveyor's waterworks, water from a source such as wells, lakes or streams, process fluids or used water. They may be polluted or contaminated or objectionable, or constitute a water source or system over which the water purveyor does not have control.

**BACKFLOW** - The flow of contaminants, pollutants, process fluids, used water, untreated water, chemicals, gases, or nonpotable waters into any part of a waterworks.

**BACKFLOW PREVENTION DEVICE** - Any approved device, method or type of construction intended to prevent backflow into a waterworks.

**BUILDING DRAIN** - That part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning five feet outside the inner face of the building wall.

**CONSUMER** - The owner or person in control of any premises supplied by or in any manner connected to the Waterworks.

**APPOMATTOX COUNTY (CONSUMER'S) WATER SYSTEM** - Any water system located on the consumer's premises, supplied by or in any manner connected to the Waterworks.

**CONTAMINATION** - Any introduction into pure water of microorganisms, wastewater, undesirable chemicals or gases.

**CROSS CONNECTION** - Any connection or structural arrangement, direct or indirect, to the Waterworks whereby backflow can occur.

**DEGREE OF HAZARD** - Is a term derived from an evaluation of the potential risk to health and the adverse effect upon the Waterworks.

**DOUBLE GATE-DOUBLE CHECKVALVE ASSEMBLY** - An approved assembly composed of two single, independently acting checkvalves, including tightly closing shutoff valves located at each end of the assembly and petcocks and test gauges for testing the watertightness of each checkvalve.

**HEALTH HAZARD** - Any condition, device or practice in a waterworks or its operation that creates, or may create, a danger to the health and well-being of the water consumer.

**INTERCHANGEABLE CONNECTION** - An arrangement or device that will allow alternate but not simultaneous use of two sources of water.

**NATURAL OUTLET** - Any outlet into a watercourse, pond, ditch, lake or other body of surface or ground water.

**pH** - The logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

**POLLUTION** - The presence of any foreign substance (chemical, physical, radiological or biological) in water that tends to degrade its quality so as to constitute an unnecessary risk or impair the usefulness of the water.

**POLLUTION HAZARD** - A condition through which an aesthetically objectionable or degrading material may enter a waterworks or a consumer's water system.

**PURE WATER or POTABLE WATER** - Water fit for human consumption and use which is sanitary and normally free of minerals, organic substances and toxic agents in excess of reasonable amounts for domestic usage in the area served and normally adequate in supply for the minimum health requirement of the persons served.

**REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE** - A device containing a minimum of two independently acting checkvalves together with an automatically operated pressure differential relief valve located between the two checkvalves.

**SERVICE CONNECTION (WATER)** - The terminal end of a service line from the Waterworks. If a meter is installed at the end of the service, then the "service connection" means the downstream end of the meter.

**SYSTEM HAZARD** - A condition posing an actual or potential damage to the physical properties of the Waterworks, sewerage facilities or a consumer's water system.

**USED WATER** - Any water supplied by a water purveyor from waterworks to a consumer's water system after it has passed through the service connection.

**WATER PURVEYOR** - Any person who supplies water to any person within this state from or by means of any waterworks.

**WATERWORKS** - All structures and appurtenances, owned by Appomattox County, and used in connection with the sources of water and the collection, storage, purification and treatment of water for drinking or domestic use and the distribution thereof to the public or residential consumers.

## **Section 2. Rates and charges policy.**

From time to time, Appomattox County shall review the water rates and charges and other specific rules and regulations governing the rates and charges associated with the use of the Waterworks, the specific rules and regulations governing the use of the Waterworks, to include a specific cross-connection and backflow prevention policy and its general standards of construction for water facilities constructed as part of or connecting to the Waterworks facilities. Any assignee may have certain expertise in this endeavor and may be so inclined to assist the County.

## **Section 3. Right of entry.**

A. Every person occupying any premises into which water is conveyed under this chapter shall permit the County of Appomattox or any authorized agent of the County to enter such premises at reasonable hours to inspect the works therein, or to see if the provisions of this ordinance and other rules and regulations relative to the Waterworks have been kept and performed.

B. The superintendent and other duly authorized employees of the County or its agent, bearing proper credentials and identification shall be permitted to enter upon all properties for the purposes of inspection, observation, measurement, sampling and testing, in accordance with the provisions of this chapter.

## **Section 4. Waterworks facility capacity.**

The County shall periodically review the operation of the Waterworks facilities with respect to the permitted capacity and the present levels of use. The available capacity of the Waterworks facilities shall be determined. The County shall utilize this information when considering new connections to its Waterworks.

**Section 5. Repair of plumbing fixtures on all premises connected to the water system.**

The owner of all premises which are connected with the Waterworks, shall be responsible for keeping all plumbing and fixtures on their premises in proper repair.

**Section 6. When and where bills for water service payable.**

All bills for water service shall be due and payable as indicated on such bills as selected by the County and may be the office of the assignee.

**Section 7. Notice of violations.**

Any person found to be violating any provisions of this chapter shall be served by the County or its agent with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations.

**Section 8. Continuance of violation beyond time limit provided in notice; penalties.**

Any person served with a notice as provided in Section 7 who shall continue the violation in question beyond the time limit provided for in such notice, as provided in Section 7 shall be guilty of a misdemeanor and, upon conviction thereof, shall be fined \$100.00 for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

## ARTICLE II

### Water Service

#### Division 1. Generally

##### **Section 1. Compliance with Code and ordinances prerequisite to application for water connection.**

The County shall refuse any application for water connection to the owner who has not complied with all the provisions of this ordinance and other ordinances of the County with reference to building lines, street planning and to the use and occupation of real estate within the County.

##### **Section 2. Application for connection to County water system of premises within County boundaries.**

The owner of any real estate within the County limits desiring to connect such real estate with the County Waterworks shall make written application to the County to receive such connection. Such application shall describe the location and nature of the premises, the purpose and estimated quantity of water desired, and shall provide such other information as may reasonably be required.

##### **Section 3. When service connection is made.**

A. Except as specified herein, all occupied buildings within the County that are located adjacent to the Waterworks, upon subdivision of the land or new zoning action, shall be connected with the Waterworks. The owner or tenants occupying such buildings shall use only the County-owned system for water consumed or used in and about the premises on which such buildings are located, except for minor or incidental use of bottled water or cistern collected water. Once a building is connected to the public water system, it may not thereafter be disconnected. However, no person shall be required to cross the private property of any other person to make the connection described in this subsection.

B. Buildings connected to a private well system prior to (*project completion date*) shall be exempt from this section for so long as such well system functions in accordance with Virginia Department of Health requirements. When such existing well system ceases to do so, the property shall comply with Subsection A. A private well in existence prior to connecting to the Waterworks, may be converted for use as non-potable water for such outdoor activities as yard watering, landscaping, washing of vehicles, etc.

C. If the pressure available to the occupied building is not adequate via the County owned system to meet minimum Virginia Department of Health requirements, then the requirements of Subsection A shall be waived.

#### **Section 4. Installation, extensions within County of water meters and cutoff.**

Upon approval by the County of the application for connection of premises within the County to the County Waterworks as required herein, the County shall cause to be installed at a place to be designated by the County, on or near one of the streets of the County, a meter and cutoff for use pursuant to such application. Any extensions of waterline or appurtenance required to connect such new premises shall be paid for by the applicant. Extensions shall be made in accordance with County direction and the County's construction standards. Such water line so extended shall be of a capacity consistent with the permitted use of such water. Such meter and cutoff shall be owned, controlled and used exclusively by the County or its agents.

#### **Section 5. Submission of plans and specifications for water service supplied to premises.**

Any person wishing to avail themselves of County water service for business, commercial, industrial, institutional, residential or other purposes in favor of premises within the County shall, in advance of any construction, submit to the County for approval detailed plans and specifications, showing clearly the proposed location, size and type of lines and construction. The proposed plans shall be in conformity with good engineering practices. Construction and other project costs for all water extension of County utilities to the premises shall be paid for by the owner of such property facilities unless approved by the county. The off-site facilities shall be dedicated to the County for operation and maintenance.

#### **Section 6. Installation and ownership of waterlines, facilities and water meters serving premises.**

No waterline installed for the benefit of premises may be connected to the County's water system unless the applicant causes to be conveyed to the County such temporary and permanent easements and deeds of conveyance for such waterlines and related facilities as the County may deem necessary.

#### **Section 7. Payment of costs by owner of premises.**

All costs of establishing water lines and facilities to benefit properties located in the County shall be borne entirely by the persons or entities that will derive benefit therefrom. The County shall calculate such cost and include such terms as it deems necessary in any permit issued to ensure timely receipt of payment in full, including a requirement that the applicant shall deposit with the County treasurer, in cash, a minimum of 110% of the estimated total cost, as determined by the County, prior to the commencement of construction of such waterlines, which funds may be applied by the County toward the cost of establishing the Waterworks.

#### **Section 8. Water connection and other charges.**

All charges for water taps or connections shall be based on the County's water user policy current at the time application is made. The charges shall be payable immediately upon approval of the application for service.

### **Section 9. Metering generally.**

The amount of water used by a customer shall be determined by direct metering of the water passing through the service line, and the County shall not be required to remeter any water for the purpose of determining the amount used by any branch line.

### **Section 10. Separate connection and meter for each housekeeping unit.**

Each housekeeping unit under a separate roof shall have an individual water connection and water meter. It shall be unlawful for any person to extend a water service line through their meter to another housekeeping unit not under the same roof.

### **Section 11. Investigation and testing of meters.**

It shall be the duty of the County to inspect and test any water meter which they believe is not in proper repair. Upon the written complaint of any water customer, the County shall forthwith investigate such complaint and inspect and test the meter in question.

### **Section 12. Wasting of water.**

The owner or occupant of premises having a connection with the County Waterworks shall not permit the water to be wasted as a result of leaks or other causes, but shall have any such leak forthwith repaired or the condition resulting in such waste corrected. Upon failure to so repair leaks or correct conditions resulting in waste of water, the water service to the premises involved may be discontinued, in addition to such other punishment as may be imposed.

### **Section 13. Discontinuance of water service.**

The County reserves the right to discontinue the water service at any time to any and all customers when, in the unlimited discretion of the County or the State Health Department, this may be deemed necessary for the protection of the water supply to the citizens of the County.

### **Section 14. Injuring or tampering with waterworks facilities.**

It shall be unlawful for any person to break, destroy, interfere or tamper with, injure or deface any house, well, meter, pipe, main line valve, fire hydrant or any machinery, equipment, facilities or fixtures used in connection with or pertaining to the Waterworks.

### **Section 15. Placing rubbish or building material on valve; obstructing or opening fire hydrant or valve.**

No person shall place any building material, rubbish or other matter on the valve of a street main or water service pipe, or obstruct access to any pipe, fire hydrant, or valve which is part of the County Waterworks, or open any of them so as to allow wastewater to enter the County Waterworks.

**Section 16. Unauthorized use of County water.**

No person shall use the County water for which they have neither paid nor obtained permission to use.

**Section 17. Allowing use of water by others.**

It shall be unlawful for the owner or occupant of any premises connected to the County Waterworks to habitually allow or permit water to be used, taken or received by any person other than himself, the occupant or members of his family or visitors at his house.

**Section 18. Using water from premises of another.**

If the water facilities of any customer are temporarily out of repair, by and with the consent of the owner of other premises, they may temporarily use County water from such other premises. They shall, however, forthwith take steps to remedy the defects in his own water facilities and if the water shall be cut off for the nonpayment of water or sewer service, the same shall not be construed to give the party any rights to use County water from the lot of another.

**Section 19. Hydrants subject to freezing.**

All hydrants connected in any way with the County Waterworks which are used and so located as to be subject to freezing shall be of a frostproof type approved by the County. Any existing hydrants that do not meet this specification shall be changed at the expense of the landowner within 10 days from the date of receipt of the notice from the County to that intent.

**Section 20. Disconnection of premises upon waste or improper use of water.**

The County reserves the right to disconnect premises which are connected with the County Waterworks from the County Waterworks should it be evident to the County that the water is wasted or improperly used.

**Section 21. Unauthorized restoration of water service.**

If the water service to the premises of any person has been lawfully cut off, it shall be unlawful for any person to reconnect such premises to the County Waterworks or to turn such water service on again without the express authority of the County.

**Section 22. Rates to be charged for water.**

A. Schedule. The county shall periodically and as necessary establish water rates. The rates outlined in the County's water rates and charges policy shall apply to all individual units using water. For the purposes of this section, the term "unit" shall mean individual family quarters (apartments, mobile home, duplexes, etc.) or an individual business, industrial or like establishment which requires separate water using facilities.

B. General billing criteria. All general billing criteria shall be as outlined in the County's water rates and charges policy referred to in Subsection A of this section.

## APPENDIX G

### APPOMATTOX COUNTY CROSS CONNECTION AND BACKFLOW PREVENTION CHAPTER 143

ADOPTED BY THE BOARD OF SUPERVISORS, DECEMBER 5, 2011

#### **Section 1. Purpose of the Ordinance**

The purpose of this ordinance is to abate or control actual or potential cross connections and protect the public health. This ordinance provides for establishment and enforcement of a program of cross connection control and backflow prevention in accordance with the Commonwealth of Virginia, State Board of Health, *Waterworks Regulations* 1995, or as amended. THIS ORDINANCE IS DIRECTED AT SERVICE LINE PROTECTION (CONTAINMENT).

#### **Section 2. Authority for Ordinance**

Commonwealth of Virginia, Department of Health  
*Waterworks Regulations*, Part II, Article 3:  
Cross Connection Control and Backflow Prevention in Waterworks

#### **Section 3. Administration of the Ordinance**

- A. The County of Appomattox or its designee, shall administer and enforce the provisions of this ordinance under the direction of the County Administrator or designee.
- B. It shall be the duty of the County of Appomattox to cause assessment to be made of properties served by the waterworks where cross connection with the waterworks is deemed possible. The method of determining potential cross connection with the waterworks and the administrative procedures shall be established by the County of Appomattox in a Cross Connection Control Program (Program) approved by the Commonwealth of Virginia, Department of Health, Office of Drinking Water .
- C. The responsibility to carry out the Program lies with the County Administrator, or designee.

#### **Section 4. Enforcement of the Ordinance**

- A. Upon request, the owner or occupants of property served shall furnish to the County Administrator or designee, pertinent information regarding the consumer's water supply system or systems on such property for the purpose

of assessing the consumer's water supply system for cross connection hazards and determining the degree of hazard, if any. The refusal of such information, when requested, shall be deemed evidence of the presence of a high degree of hazard cross connection.

B. Notice of Violation

Any consumer's water supply system owner found to be in violation of any provision of this ordinance shall be served a written notice of violation sent certified mail to the consumer's water supply system owner's last known address, stating the nature of the violation, corrective action required and providing a reasonable time limit, not to exceed 30 days, from the date of receipt of the notice of violation, to bring the consumer's water supply system into compliance with this ordinance or have water service terminated.

C. Penalties

Any owner of properties served by a connection to the waterworks found guilty of violating any of the provisions of this ordinance, or any written order of the County Administrator or designee, in pursuance thereof, shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not less than \$100 or more than \$500 for each violation. Each day upon which a violation of the provisions of this act shall occur shall be deemed a separate and additional violation for the purposes of this ordinance.

## **Section 5. Responsibilities of the County of Appomattox**

Effective cross connection control and backflow prevention requires the cooperation of the County of Appomattox, the County Administrator, the Town of Appomattox, the Director of Public Works, the owner(s) of the property served, the Local Building Official and the backflow prevention device tester.

- A. The Program shall be carried out in accordance with the Commonwealth of Virginia, State Board of Health, *Waterworks Regulations* and shall as a minimum provide containment of potential contaminants at the consumer's service connection.
- B. The County of Appomattox or designee has full responsibility for water quality and for the construction, maintenance and operation of the waterworks beginning at the water source and ending at the service connection.
- C. The owner of the property served and the County of Appomattox have shared responsibility for water quality and for the construction, maintenance, and

operation of the consumer's water supply system from the service connection to the free flowing outlet.

- D. The County of Appomattox shall, to the extent of their jurisdiction, provide continuing identification and evaluation of all cross connection hazards. This shall include an assessment of each consumer's water supply system for cross connections to be followed by the requirement, if necessary, of installation of a backflow prevention device or separation. Assessments shall be performed at least annually.
- E. In the event of the backflow of pollution or contamination into the waterworks, the County of Appomattox or designee shall promptly take or cause corrective action to confine and eliminate the pollution or contamination. The County of Appomattox or designee shall report to the appropriate Commonwealth of Virginia, Department of Health, Office of Drinking Water Field Office in the most expeditious manner (usually by telephone) when backflow occurs and shall submit a written report by the 10th day of the month following the month during which backflow occurred addressing the incident, its causes, effects, and preventative or control measures required or taken.
- F. The County of Appomattox shall take positive action to ensure that the waterworks is adequately protected from cross connections and backflow at all times. If a cross connection exists or backflow occurs into a consumer's water supply system or into the waterworks or if the consumer's water supply system causes the pressure in the waterworks to be lowered below 20 psi gauge, the County of Appomattox may discontinue the water service to the consumer and water service shall not be restored until the deficiencies have been corrected or eliminated to the satisfaction of the County of Appomattox or designee.
- G. In order to protect the occupants of a premises, County Administrator, or designee, should inform the consumer's water supply system owner(s) of any cross connection beyond the service connection that should be abated or controlled by application of an appropriate backflow prevention device or separation. Appropriate backflow prevention device or separation should be applied at each point-of-use and/or applied to the consumer's water supply system, isolating an area which may be a health or pollutional hazard to the consumer's water supply system or to the waterworks.
- H. Records of backflow prevention devices, separations, and consumer's water supply systems, including inspection records, records of backflow incidents, and records of device tests shall be maintained by the County of Appomattox or designee, for ten years.

## **Section 6. Responsibilities of the Consumer's Water Supply System Owner**

- A. The consumer's water supply system owner(s), at their own expense, shall install, operate, test, and maintain required backflow prevention devices or backflow prevention by separations.
- B. The consumer's water supply system owner(s) shall provide copies of test results, maintenance records and overhaul records to the County of Appomattox within 30 days of completion of testing or work. Such testing or work shall have been performed by device testers which have obtained a certificate of completion of a course recognized by the American Water Works Association, the Virginia Department of Health or the Virginia Cross Connection Control Association for cross connection control and backflow prevention inspection, maintenance and testing or otherwise be certified by a Commonwealth of Virginia tradesman certification program.

## **Section 7. Preventative and Control Measures for Containment**

### **A. Service Line Protection**

Backflow prevention device or separation shall be installed at the service connection to a consumer's water supply system where, in the judgment of the County of Appomattox or designee a health or pollitional hazard to the consumer's water supply system or to the waterworks exists or may exist unless such hazards are abated or controlled to the satisfaction of the County of Appomattox or designee.

### **B. Special Conditions**

- 1. When, as a matter of practicality, the backflow prevention device or separation cannot be installed at the service connection, the device or separation may be located downstream of the service connection but prior to any unprotected takeoffs.
- 2. Where all actual or potential cross connections can be easily correctable at each point-of-use and where the consumer's water supply system is not intricate or complex, point-of-use isolation protection by application of an appropriate backflow prevention device or backflow prevention by separation may be used at each point-of-use in lieu of installing a containment device at the service connection.

- C. A backflow prevention device or backflow prevention by separation shall be installed at each service connection to a consumer's water supply system serving premises where the following conditions exist:
1. Premises on which any substance is handled in such a manner as to create an actual or potential hazard to a waterworks (this shall include premises having auxiliary water systems or having sources or systems containing process fluids or waters originating from a waterworks which are no longer under the control of the waterworks owner).
  2. Premises having internal cross connections that, in the judgment of the County of Appomattox may not be easily correctable or intricate plumbing arrangements which make it impracticable to determine whether or not cross connections exist.
  3. Premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make an evaluation of all cross connection hazards.
  4. Premises having a repeated history of cross connections being established or reestablished.
  5. Other premises specified by the County of Appomattox where cause can be shown that a potential cross connection hazard not enumerated above exists.
- D. Premises having booster pumps or fire pumps connected to the waterworks shall have the pumps equipped with a pressure sensing device to shut off or regulate the flow from the booster pump when the pressure in the waterworks drops to a minimum of 20 psi gauge at the service connection.
- E. An approved backflow prevention device or backflow prevention by separation shall be installed at each service connection to a consumer's water supply system or installed under Special Conditions, Section VII.B. serving, but not necessarily limited to, the following types of facilities:
1. Hospitals, mortuaries, clinics, veterinary establishments, nursing homes, dental offices and medical buildings;
  2. Laboratories;
  3. Piers, docks, waterfront facilities;

4. Sewage treatment plants, sewage pumping stations, or storm water pumping stations;
  5. Food and beverage processing plants;
  6. Chemical plants, dyeing plants and pharmaceutical plants;
  7. Metal plating industries;
  8. Petroleum or natural gas processing or storage plants;
  9. Radioactive materials processing plants or nuclear reactors;
  10. Car washes and laundries;
  11. Lawn sprinkler systems, irrigation systems;
  12. Fire service systems;
  13. Slaughter houses and poultry processing plants;
  14. Farms where the water is used for other than household purposes;
  15. Commercial greenhouses and nurseries;
  16. Health clubs with swimming pools, therapeutic baths, hot tubs or saunas;
  17. Paper and paper products plants and printing plants;
  18. Pesticide or exterminating companies and their vehicles with storage or mixing tanks;
  19. Schools or colleges with laboratory facilities;
  20. Highrise buildings (4 or more stories);
  21. Multiuse commercial, office, or warehouse facilities;
  22. Others specified by the County of Appomattox or designee when reasonable cause can be shown for a potential backflow or cross connection hazard.
- F. Where lawn sprinkler systems, irrigation systems or fire service systems are connected directly to the waterworks with a separate service connection, a

backflow prevention device or backflow prevention by separation shall be installed at the service connection or installed under Special Conditions, Section VII.B.1.

### **Section 8. Type of Protection Required**

The type of protection required shall depend on the degree of hazard which exists or may exist. The degree of hazard, either high, moderate, or low, is based on the nature of the contaminant; the potential health hazard; the probability of the backflow occurrence; the method of backflow either by backpressure or by backsiphonage; and the potential effect on waterworks structures, equipment, and appurtenances used in the storage, collection, purification, treatment, and distribution of pure water.

Table 1 shall be used as a guide to determine the degree of hazard for any situation.

- A. An air gap or physical disconnection gives the highest degree of protection and shall be used whenever practical to do so in high hazard situations subject to backpressure.
- B. An air gap, physical disconnection and a reduced pressure principle backflow prevention device will protect against backpressure when operating properly.
- C. Pressure vacuum breakers will not protect against backpressure, but will protect against backsiphonage when operating properly. Pressure vacuum breakers may be used in low, moderate or high hazard situations subject to backsiphonage only.
- D. A double gate - double check valve assembly shall not be used in high hazard situations.
- E. Barometric loops are not acceptable.
- F. Interchangeable connections or change-over devices are not acceptable.

### **Section 9. Backflow Prevention Devices**

Backflow Prevention Devices and Backflow Prevention by Separation for Containment

- A. Backflow prevention devices for containment include the reduced pressure principle backflow prevention assembly, the double gate - double check valve assembly, and the pressure vacuum breaker assembly.

- B. Backflow prevention by separation shall be an air gap or physical disconnection. The minimum air gap shall be twice the effective opening of a potable water outlet unless the outlet is a distance less than three times the effective opening away from a wall or similar vertical surface, in which case the minimum air gap shall be three times the effective opening of the outlet. In no case shall the minimum air gap be less than one inch.
- C. Backflow prevention devices shall be of the approved type and shall comply with the most recent American Water Works Association Standards and shall be approved for containment by the University of Southern California, Foundation for Cross-Connection Control and Hydraulic Research.
- D. Backflow prevention devices shall be installed in a manner approved by the County of Appomattox and in accordance with the University of Southern California, Foundation for Cross-Connection Control and Hydraulic Research recommendations and the manufacturer's installation instructions. Vertical or horizontal positioning shall be as approved by the University of Southern California, Foundation for Cross-Connection Control and Hydraulic Research.
- E. Existing backflow prevention devices, in place prior to the effective date of this ordinance, may be subsequently approved by the County of Appomattox and shall be excluded from the requirements of Section 9. C. and D., except for inspection, testing, and maintenance requirements, if the County of Appomattox is assured that the devices will protect the waterworks.
- F. For the purpose of application to Special Conditions, Section 7.B.2., point-of-use isolation devices or separations shall be as specified by the County of Appomattox where reasonable assurance can be shown that the device or separation will protect the waterworks. As a minimum, point-of-use devices should bear an appropriate American Society of Sanitary Engineering Standard Number.
- G. Backflow prevention devices with openings, outlets, or vents that are designed to operate or open during backflow prevention shall not be installed in pits or areas subject to flooding.

#### **Section 10. Maintenance and Inspection Requirements**

- A. It shall be the responsibility of the consumer's water supply system owner(s) to maintain all backflow prevention devices or separations installed in accordance with Section VII in good working order and to make no piping or

other arrangements for the purpose of bypassing or defeating backflow prevention devices or separations.

- B. Operational testing and inspection schedules shall be established by the County of Appomattox as outlined in the Cross Connection Control Program for all backflow prevention devices and separations which are installed at the service connection or installed under Special Conditions, Section VII. The interval between testing and inspection of each device shall be established in accordance with the age and condition of the device and the device manufacturer's recommendations. Backflow prevention device and separation inspection and testing intervals shall not exceed 1 year.
- C. Backflow prevention device overhaul procedures and replacement parts shall be in accordance with the manufacturer's recommendations.
- D. Backflow prevention device testing procedures shall be in accordance with the University of Southern California, Foundation for Cross-Connection Control and Hydraulic Research, Backflow Prevention Assembly Field Test Procedure and the manufacturer's instructions.

### **Section 11. Definitions**

*Air Gap* — means the unobstructed vertical distance through the free atmosphere between the lowest point of the potable water outlet and the rim of the receiving vessel.

*Auxiliary Water System* — means any water system on or available to the premises other than the waterworks. These auxiliary waters may include water from a source such as wells, lakes, or streams; or process fluids; or used water. They may be polluted or contaminated or objectionable, or constitute an unapproved water source or system over which the water purveyor does not have control.

*Backflow* — means the flow of water or other liquids, mixtures, or substances into a waterworks from any source or sources other than its intended source.

*Backflow Prevention by Separation ("Separation")* — means preventing backflow by either an air gap or by physical disconnection of a waterworks by the removal or absence of pipes, fittings, or fixtures that connect a waterworks directly or indirectly to a non-potable system or one of questionable quality.

*Backflow Prevention Device ("Device")* — means any approved device intended to prevent backflow into a waterworks.

*Backpressure Backflow* — means backflow caused by pressure in the downstream piping which is superior to the supply pressure at the point of consideration.

*Backsiphonage Backflow* — means backflow caused by a reduction in pressure which causes a partial vacuum creating a siphon effect.

*Consumer* — means person who drinks water from a waterworks.

*Consumer's Water Supply System ("Consumer's System")* — means the water service pipe, water distributing pipes, and necessary connecting pipes, fittings, control valves, and all appurtenances in or adjacent to the building or premises.

*Containment* — means the prevention of backflow into a waterworks from a consumer's water supply system by a backflow prevention device or by backflow prevention by separation at the service connection.

*Contaminant* — means any objectionable or hazardous physical, chemical, biological, or radiological substance or matter in water.

*Cross Connection* — means any connection or structural arrangement, direct or indirect, to the waterworks whereby backflow can occur.

*Degree of Hazard* — means either a high, moderate or low hazard based on the nature of the contaminant; the potential health hazard; the probability of the backflow occurrence; the method of backflow either by backpressure or by backsiphonage; and the potential effect on waterworks structures, equipment, and appurtenances used in the storage, collection, purification, treatment, and distribution of pure water.

*Distribution Main* — means a water main whose primary purpose is to provide treated water to service connections.

*Division* — means the Commonwealth of Virginia, Virginia Department of Health, Office of Drinking Water , Office of Drinking Water .

*Domestic Use or Usage* — means normal family or household use, including drinking, laundering, bathing, cooking, heating, cleaning and flushing toilets (see Title 32.1, Article 2, *Code of Virginia*, 1950, as amended).

*Double Gate-Double Check Valve Assembly* — means an approved assembly designed to prevent backsiphonage or backpressure backflow and used for moderate or low hazard situations, composed of two independently operating, spring-loaded check valves, tightly closing shutoff valves located at each end of the assembly and fitted with properly located test cocks.

*Entry Point* — means the place where water from the source is delivered to the distribution system.

*Health Hazard* — means any condition, device, or practice in a waterworks or its operation that creates, or may create, a danger to the health and well being of the water consumer.

*Isolation* — means the prevention of backflow into a waterworks from a consumer's water supply system by a backflow prevention device or by backflow prevention by separation at the sources of potential contamination in the consumer's water supply system. This is also called point-of-use isolation. Isolation of an area or zone within a consumer's water supply system confines the potential source of contamination to a specific area or zone. This is called area or zone isolation.

*Maximum Contaminant Level* — means the maximum permissible level of a contaminant in water which is delivered to the free flowing outlet of the ultimate user of a waterworks, except in the cases of turbidity and VOCs, where the maximum permissible level is measured at each entry point to the distribution system. Contaminants added to the water under circumstances controlled by the user, except those resulting from corrosion of piping and plumbing caused by water quality, are excluded from this definition. Maximum contaminant levels may be either "primary" (PMCL) meaning based on health considerations or "secondary" (SMCL) meaning based on aesthetic considerations.

*Plumbing Fixture* — means a receptacle or device which is either permanently or temporarily connected to the water distribution system of the premises, and demands a supply of water therefrom; or discharges used water, waste materials, or sewage either directly or indirectly to the drainage system of the premises; or requires both a water supply connection and a discharge to the drainage system of the premises.

*Pollution* — means the presence of any foreign substance (chemical, physical, radiological, or biological) in water that tends to degrade its quality so as to constitute an unnecessary risk or impair the usefulness of the water.

*Pollution Hazard* — means a condition through which an aesthetically objectionable or degrading material may enter the waterworks or a consumer's water system.

*Premises* — means a piece of real estate; house or building and its land.

*Pressure Vacuum Breaker* — means an approved assembly designed to prevent backsiphonage backflow and used for high, moderate, or low hazard situations, composed of one or two independently operating, spring-loaded check valves; an

independently operating, spring-loaded air-inlet valve; tightly closing shutoff valves located at each end of the assembly; and fitted with properly located test cocks.

*Process Fluids* — means any kind of fluid or solution which may be chemically, biologically, or otherwise contaminated or polluted which would constitute a health, pollutional, or system hazard if introduced into the waterworks. This includes, but is not limited to:

1. Polluted or contaminated water,
2. Process waters,
3. Used water, originating from the waterworks, which may have deteriorated in sanitary quality.
4. Cooling waters,
5. Contaminated natural waters taken from wells, lakes, streams, or irrigation systems,
6. Chemicals in solution or suspension, and
7. Oils, gases, acids, alkalis, and other liquid and gaseous fluid used in industrial or other processes, or for fire fighting purposes.

*Pure Water or Potable Water* — means water fit for human consumption and domestic use which is sanitary and normally free of minerals, organic substances, and toxic agents in excess of reasonable amounts for domestic usage in the area served and normally adequate in quantity and quality for the minimum health requirements of the persons served.

*Reduced Pressure Principle Backflow Prevention Device (RPZ device)* — means an approved assembly designed to prevent backsiphonage or backpressure backflow used for high, moderate, or low hazard situations, composed of a minimum of two independently operating, spring-loaded check valves together with an independent, hydraulically operating pressure differential relief valve located between the two check valves. During normal flow and at the cessation of normal flow, the pressure between these two checks shall be less than the supply pressure. The unit must include tightly closing shutoff valves located at each end of the assembly and be fitted with properly located test cocks.

*Service Connection* — means the point of delivery of water to a customer's building service line as follows:

1. If a meter is installed, the service connection is the downstream side of the meter;
2. If a meter is not installed, the service connection is the point of connection to the waterworks;
3. When the water purveyor is also the building owner, the service connection is the entry point to the building.

*System Hazard* — means a condition posing a threat of or actually causing damage to the physical properties of the waterworks or a consumer's water supply system.

*Used Water* — means water supplied from the waterworks to a consumer's water supply system after it has passed through the service connection.

*Water Supply* — means the water that shall have been taken into a waterworks from all wells, streams, springs, lakes, and other bodies of surface water (natural or impounded), and the tributaries thereto, and all impounded groundwater, but the term "water supply" shall not include any waters above the point of intake of such waterworks.

*Waterworks* — means a system that serves piped water for drinking or domestic use to (1) the public, (2) at least 15 connections, or (3) an average of 25 individuals for at least 60 days out of the year. The term "waterworks" shall include all structures, equipment, and appurtenances used in the storage, collection, purification, treatment, and distribution of pure water except the piping and fixtures inside the building where such water is delivered (see Title 32.1, Article 2, *Code of Virginia*, 1950, as amended).

*Waterworks Owner* — means an individual, group of individuals, partnership, firm, association, institution, corporation, government entity, or the Federal Government which supplies or proposes to supply water to any person within this State from or by means of any waterworks (see Title 32.1, Article 2, *Code of Virginia*, 1950, as amended).

TABLE 1

DETERMINATION OF DEGREE OF HAZARD

Premises with the following conditions shall be rated at the corresponding degree of hazard.

|                 |   |
|-----------------|---|
| High Hazard     | The contaminant is toxic, poisonous, noxious or unhealthy   |
|                 | In the event of backflow of the contaminant, a health hazard would exist  |
|                 | A high probability exists of a backflow occurrence either by backpressure or by backsiphonage                   |
|                 | The contaminant would disrupt the service of piped water for drinking or domestic use                           |
|                 | Examples — Sewage, used water, non potable water, auxiliary water systems and toxic or hazardous chemicals      |
| Moderate Hazard | The contaminant would only degrade the quality of the water aesthetically or impair the usefulness of the water |
|                 | In the event of backflow of the contaminant, a health hazard would not exist                                    |
|                 | A moderate probability exists of a backflow occurrence either by backpressure or by backsiphonage               |
|                 | The contaminant would not seriously disrupt service of piped water for drinking or domestic use                 |
|                 | Examples — Food stuff, nontoxic chemicals and non-hazardous chemicals   |
| Low Hazard      | The contaminant would only degrade the quality of the water aesthetically                                       |
|                 | In the event of backflow of the contaminant, a health hazard would not exist                                    |
|                 | A low probability exists of the occurrence of backflow  |
|                 | Backflow would only occur by backsiphonage  |
|                 | The contaminant would not disrupt service of piped water  |
|                 | Examples — Food stuff, nontoxic chemicals and non-hazardous chemicals   |

**Section 12. Effective Date**

This ordinance shall become effective upon adoption.

## APPENDIX H

### ADMINISTRATION POLICY, USER AND AVAILABILITY FEES ADOPTED BY THE BOARD OF SUPERVISORS BY ORDINANCE, DECEMBER 5, 2011

- A. User Rates-Billing Period: Monthly  
Rates Effective: December 5, 2011

Water: Base Rate: \$4:00 per month per user for Capital Replacement  
Incremental Rate: \$5.80 per 1000 gallons for all consumption

Notes:

1. Billing period is monthly
2. Equivalent Residential Connections (ERC) computed on the basis of 4400 gallons of water purchased per month equal to one (1) ERC. Equivalent Residential Connections (ERC) computed on an annual basis and applied during the budget or fiscal period. Unless there is a measured 15% change (Increase or decrease) in water purchased.

- B. Connection Fees: Connection fees are defined as a charge designed to cover the cost of making the connection.

Water: Standard ¾ " water connection with water main located on same side of the road as the residents \$1,200.00

For connections larger than ¾", and require installing service line across any primary or secondary roads, cost of connection shall be at cost of materials and labor.

- C. Water Facilities-Availability Fees

The purpose of the availability fee is to defray the continuing cost of providing water treatment, transmission mains, pumping stations, storage facilities, and other capital items. This is a one-time fee per service connection.

The charge for availability fee for water service shall be made for each new service in accord with the following schedule:

|  |            |
|--|------------|
| 1. Single-Family Dwelling  | \$1,200.00 |
| 2. Multi-Family, per family unit<br>(Duplexes, condominiums, town-<br>Houses, apartments, & mobile<br>Homes) Per family unit is considered<br>Separately | \$1,200.00 |
| 3. Motel (per unit or room)  | \$300.00   |
| 4. Restaurants (per seat)  | \$100.00   |
| 5. Laundromats (per machine)   | \$900.00   |

6. Nursing Homes (per bed) \$400.00
7. Homes for the Aged (per bed) \$300.00
8. Hospitals (per bed) \$600.00
9. Doctor's Office (per patient bed) \$400.00
10. Theaters, auditorium type (per seat) \$40.00
11. Theaters, drive-in type (per car) \$40.00
12. Camps, resorts, overnight(per site) \$40.00
13. Picnic Areas (per person & park capacity) \$40.00
14. Luxury Camps with flush toilets \$200.00
15. Any proposed use not covered above or in cases where a higher factor, hardship or community waiver is recommended by staff, the Board of Supervisors shall make the final decision based upon written application with supporting data.

Availability charges for an water use not classified above shall be based on an equivalent residential use (ERU) determination by the County Administrator or designee. Each ERU determined shall be assessed a charge of \$1,200.00 per ERU for water. The ERU determination shall be based on the building or premise shall be estimated utilizing design analysis and/or records of similar uses. All projected ERU determinations discharge to determine the accuracy of the ERU determination. If the ERU determination was high, the County will refund the availability fee overpayment. Should any building use change placing a greater demand on the water system, additional availability fees may be assessed by the County Administrator or designee based on the additional demand, with full credit given for availability fees already paid.

D. Account Charge: \$10.00

The purpose of this charge is to defray the cost incurred in establishing the new customer account.

E. Deposits

The County of Appomattox is authorized to require the following deposits from persons opening new water accounts:

1. Residential Customers \$100.00
2. Business (Commercial & Institutional)
  - a. 3/4" meter connection \$100.00
  - b. 1" meter connection \$100.00
3. Commercial Customers \$200.00

The County may also in its discretion, require additional deposit if the size of the service warrants. Deposit is to offset one two month average charge which may become delinquent. At such time as water service is discontinued, the deposit shall be returned to the person making the deposit. Any deposit not claimed after one (1) year of discontinuance, the deposit shall be considered abandoned and shall not be subject to reclamation. When the person opening a new account owns the property to be supplied water, the County may not require a deposit.

- F. Billing Policy: All bills are due and payable upon receipt. If not paid within twenty (20) days, a penalty in the amount of 10% of the bill will be added. If the bill and penalty are not paid within ten (10) days of the penalty date, service will be discontinued. If service is requested during the next ten (10) day period, a reconnection fee of \$50.00 and the past due bill plus penalty must be paid prior to service being restored. When restoration of service is then requested, the past due bill, penalty and reconnection charge (availability charge) will be due before service is restored.
- G. Unauthorized Connections/Cross-Connections- The connection for any other water supply to the County's system is strictly prohibited. See Cross-Connection Control Ordinance.

Cross-connections of a private or an auxiliary water system to the County's public water system is restricted according to the WATERWORKS REGULATIONS FOR PUBLIC DRINKING WATER SUPPLY as adopted by the Commonwealth of Virginia, Department of Health.

- H. Use of Service: The new service applicant is expected to begin use of water within thirty (30) days from the date of which service is available. Therefore, billing will commence at the end of this thirty (30) day period in accordance with prescribed rates, terms, and conditions.
- I. The County of Appomattox reserves the right to institute any and all measures deemed necessary in the event of a natural disaster, emergency, drought, or other conditions which impacts the water system. All measures considered will be as reasonable as possible. Generally residential customer service, although it may be curtailed, will be given highest service priority.
- J. The County of Appomattox reserves the right to institute any and all measures deemed necessary in the event of a natural disaster, emergency, drought, or other conditions which impacts on the water system. All measures considered will be as reasonable as possible. Generally, residential customer service, although it may be curtailed, will be given highest service priority.

Availability fees to be determined on the basis of equivalent residential connections and the equivalent residential availability charge.