**COWETA COUNTY WATER AND SEWERAGE AUTHORITY** 

**BACKFLOW PREVENTION BY CONTAINMENT** 

**POLICY AND PROCEDURE** 



### **DEVELOPED BY**

### COWETA COUNTY, GEORGIA

July 2010

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### FOREWORD

IT IS HEREBY DETERMINED NECESSARY FOR THE PROTECTION OF THE PUBLIC HEALTH, SAFETY, WELFARE AND CONVENIENCE OF THE CITIZENS OF COWETA COUNTY, AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE GEORGIA DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION DIVISION AND THE GEORGIA STATE PLUMBING CODE; THE COWETA COUNTY WATER SYSTEM ESTABLISHES A <u>POLICY OF BACKFLOW PREVENTION BY</u> <u>CONTAINMENT</u>. PROCEDURES OUTLINED HEREIN, ALONG WITH OTHER APPLICABLE CODES AND REGULATIONS, ARE DESIGNED TO PROVIDE REASONABLE PROTECTION FOR THE COWETA COUNTY POTABLE WATER SYSTEM FROM CONTAMINATION AND POLLUTION RESULTING FROM BACKFLOW AND/OR BACKSIPHONAGE THROUGH UNCONTROLLED PLUMBING CONNECTIONS AND/OR CROSS-CONNECTIONS.

### RESOLUTION ADOPTING THE POLICY'S AND PROCEDURES

POLICYS AND PROCEDURES - TO ADOPT AN AMENDED AND UPDATED POLICY OF BACKFLOW PREVENTION BY CONTAINMENT, COWETA COUNTY, GEORGIA TO PROVIDE FOR AN EFFECTIVE DATE FOR THESE POLICYS AND PROCEDURES; TO PROVIDE THAT THE COUNTY MAY WITHHOLD THE ISSUANCE OF BUILDING PERMITS AND/OR PERMITS FOR OCCUPANCY OR USE TO WHICH THIS POLICYS APPLIES; TO REPEAL PRIOR ORDINANCE, AND FOR OTHER PURPOSES.

WHEREAS, THE COWETA COUNTY BOARD OF COMMISSIONERS HAS ADOPTED A OF POLICY OF BACKFLOW PREVENTION BY CONTAINMENT FOR THE COWETA COUNTY WATER SYSTEM ON 15 JANUARY 1991 AND

### WHEREAS, IT IS NOW NECESSARY AND PRUDENT FOR THE COWETA COUNTY WATER AND SEWEAGE AUTHORITY **TO ADOPT THIS MODIFIED POLICYS AND PROCEDURES.**

NOW, THEREFORE BE IT ORDAINED BY THE AUTHORITY OF THE COWETA COUNTY BOARD OF COMMISSIONERS AS FOLLOWS:

- 1. THAT A POLICY OF BACKFLOW PREVENTION BY CONTAINMENT BE ADOPTED AS OF \_\_\_\_\_\_. THIS POLICY IS ESTABLISHED AND DESIGNED TO PROVIDE REASONABLE PROTECTION FOR THE COWETA COUNTY POTABLE WATER SYSTEM FROM CONTAMINATION AND POLLUTION RESULTING FROM BACKFLOW AND/OR BACKSIPHONAGE THROUGH UNCONTROLLED PLUMBING CONNECTIONS AND/OR CROSS-CONNECTIONS.
  - 2. THAT THESE POLICY'S AND PROCEDURES, WHICH INCLUDES THE POLICY AND PROCEDURES OF BACKFLOW PREVENTION BY CONTAINMENT, IS TO BE FILED WITH THE PERMANENT RECORDS OF THE MINUTES OF COWETA COUNTY WATER AND SEWERAGE AUTHORITY BOARD MEMBERS AND THAT IT MAY BE INSPECTED BY ANY INTERESTED PARTY DURING REGULAR OFFICE HOURS, AT THE COUNTY ADMINISTRATION BUILDING, NEWNAN, GEORGIA.
  - 3. These Policy's and Procedures shall be in force and effect from and after the date of its approval by the Board of Commissioners of Coweta County.
  - 4. THAT COWETA COUNTY MAY WITHHOLD THE ISSUANCE OF ANY BUILDING PERMIT AND/OR OCCUPANCY OR USE PERMIT IN ANY SUBDIVISION, DEVELOPMENT OR IMPROVEMENT TO WHICH THIS POLICY'S PROCEDURES APPLIES, UNTIL THERE IS COMPLIANCE WITH THE REGULATIONS AND

SPECIFICATIONS CONTAINED IN SAID POLICY OF BACKFLOW PREVENTION BY CONTAINMENT.

- 5. THAT VIOLATION OF THESE POLICY'S AND PROCEDURES SHALL BE PUNISHED IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE OFFICIAL CODE OF GEORGIA.
- 6. THAT ALL POLICY'S AND PROCEDURES, OR PARTS THEREOF, IN CONFLICT WITH THESE POLICY'S ARE HEREBY REPEALED.

# MOTION MADE AND SECONDED, PASSED AND ADOPTED THIS \_\_ DAY OF \_\_\_\_, 19\_\_\_.

CHAIRMAN, BOARD OF COMMISSIONERS COWETA COUNTY, GEORGIA

COMMISSIONER

COMMISSIONER

COMMISSIONER

COMMISSIONER

ATTEST:

COUNTY CLERK

### SECTION 1. INTENT, PURPOSE AND CONTROL

### 1. INTENT:

TO RECOGNIZE THAT ALL CONSUMER'S WATER SYSTEMS HAVE CONNECTIONS TO APPARATUS, VESSELS, ETC., THAT COULD HAVE IMPURITIES IN VARYING DEGREES, AND IF NOT PROPERLY CONTROLLED AND CONTAINED, COULD CONTAMINATE OR POLLUTE BOTH THE CONSUMER'S WATER SYSTEM AND THE PUBLIC POTABLE WATER SUPPLY/SYSTEM. IT IS ALSO THE INTENT TO APPLY THE PRINCIPLE THAT THE TYPE OF PROTECTION REQUIRED SHALL BE THAT DETERMINED BY WHETHER THE IMPURITIES ARE HAZARDOUS CONTAMINANTS OR NONHAZARDOUS POLLUTANTS.

### 2. **PURPOSE:**

- A. TO ASSIST THE CONSUMER IN PROTECTING HIS OWN POTABLE WATER SYSTEM AGAINST ACTUAL OR POTENTIAL BACKFLOW AND/OR BACKSIPHONAGE OF ANY CONTAMINANT OR POLLUTANT BY CONTROLLING EACH CROSS-CONNECTION OR POTENTIAL CROSS-CONNECTION WITHIN THE CONSUMER'S PREMISES. REFERRED TO AS "THE FIRST LINE OF DEFENSE" OR "PRIMARY PROTECTION".
- B. TO PROTECT THE COWETA COUNTY PUBLIC POTABLE WATER SUPPLY/SYSTEM AGAINST ACTUAL OR POTENTIAL BACKFLOW BY CONTAINING WITHIN A CONSUMER'S PREMISES, ANY POLLUTION OR CONTAMINATION THAT HAS ENTERED, OR MAY ENTER, INTO THE CONSUMER'S POTABLE WATER SYSTEM THROUGH AN UNDISCOVERED OR UNCONTROLLED CROSS-CONNECTION ON SAID PREMISES. REFERRED TO AS "THE SECOND LINE OF DEFENSE" OR "SECONDARY PROTECTION".
- C. TO ELIMINATE UNCONTROLLED CROSS-CONNECTIONS TO NON-POTABLE SYSTEMS AS WELL AS UNCONTROLLED INTERCONNECTIONS TO ANY POTABLE WATER SYSTEM THAT IS NOT A PART OF THE COWETA COUNTY WATER SYSTEM, BY INSTALLING AN APPROPRIATE BACKFLOW PREVENTION DEVICE(S) TO ISOLATE SUCH SYSTEM(S) FROM THAT OF THE COWETA COUNTY WATER SYSTEM.
- D. TO ESTABLISH, COORDINATE, EXECUTE AND MAINTAIN A TOTAL BACKFLOW PREVENTION PROGRAM.
- 3. CONTROL:

REQUIRES COOPERATION BETWEEN COWETA COUNTY WATER AND SEWERAGE AUTHORITY, BUILDING INSPECTION DEPARTMENT AN D IT'S WATER CONSUMERS IN THE EXECUTION OF, AND THE ADHERENCE TO THE DUTIES AND RESPONSIBILITIES OF EACH AS SET FORTH BY THIS POLICY AND THESE PROCEDURES, IN CONJUNCTION WITH OTHER APPLICABLE CODES, RULES AND REGULATIONS.

### SECTION 2. RESPONSIBILITIES

### 1. WATER AND SEWER DEPARTMENT (PURVEYOR):

THE SUPERINTENDENT OF THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY, AS AUTHORIZED THROUGH POLICY AND PROCEDURES ADOPTED BY THE COWETA COUNTY BOARD OF COMMISSIONERS, IS PRIMARILY RESPONSIBLE FOR PREVENTING THE CONTAMINATION AND POLI UTION OF THE PUBLIC POTABLE WATER SUPPLY/SYSTEM BY INSTITUTING A PROGRAM OF BACKFLOW PREVENTION BY CONTAINMENT. SUCH RESPONSIBILITY BEGINS AT THE POINT OF ORIGIN OF THE PUBLIC POTABLE WATER SUPPLY AND INCLUDES ALL THE DISTRIBUTION SYSTEM AND TERMINATES AT THE SERVICE CONNECTION FOR THE CONSUMER'S WATER SYSTEM. THE REQUIRED CONSUMER SUPPLIED BACKFLOW PREVENTION DEVICE AT THE SERVICE CONNECTION SHALL PROVIDE MAXIMUM (REDUCED PRESSURE ZONE ASSEMBLY - RPZ) OR MINIMUM (DOUBLE CHECK VALVE ASSEMBLY - DCV) PROTECTION AS CONCLUDED BY THE SUPERINTENDENT OR HIS AUTHORIZED REPRESENTATIVE. IN ADDITION. THE SUPERINTENDENT SHALL EXERCISE REASONABLE VIGILANCE TO ENSURE THAT THE CONSUMER ADHERES TO THIS POLICY AND THESE PROCEDURES AS STATED AND OUTLINED HEREIN. IN ORDER FOR THE DEPARTMENT TO DOWNGRADE FROM MAXIMUM PROTECTION AT A SERVICE CONNECTION A CERTIFICATION OF PLUMBING CODE COMPLIANCE (AS PERTAINING TO BACKFLOW PREVENTION) PLUS ANNUAL RECERTIFICATION SHALL BE REQUIRED.

### 2. THE BUILDING INSPECTION DEPARTMENT

THE BUILDING INSPECTION DEPARTMENT IS PRIMARILY RESPONSIBLE FOR ENFORCING THE PLUMBING CODE TO PREVENT CONTAMINATION AND POLLUTION WITHIN THE CONSUMER'S WATER SYSTEM THROUGH A PROGRAM OF "BACKFLOW PREVENTION BY CROSS CONNECTION CONTROL," REQUIRING THAT ALL PLUMBING OUTLETS TERMINATE THROUGH AN APPROVED AIR GAP OR BE CONTROLLED BY AN APPROVED MECHANICAL BACKFLOW PREVENTION DEVICE. SUCH RESPONSIBILITY BEGINS AT THE SERVICE CONNECTION TO THE PREMISES AND EXTENDS TO THE EXTREMITIES OF THE CONSUMER'S POTABLE WATER SYSTEM.

### 3. THE CONSUMER (CUSTOMER)

THE CONSUMER HAS THE RESPONSIBILITY FOR PROTECTING BOTH THE POTABLE WATER IN HIS OWN SYSTEM FROM DEGRADATION DUE TO CONDITIONS ORIGINATING ON HIS PREMISES, BY COMPLYING WITH THE PLUMBING CODE, AND ALSO FOR PROTECTING THE QUALITY OF WATER IN THE COWETA COUNTY WATER SYSTEM AGAINST ANY POTENTIAL OR ACTUAL HEALTH HAZARDS GENERATED ON OR FROM HIS PREMISES THROUGH UNCONTROLLED CROSS-CONNECTIONS BY BACKFLOW PREVENTION AT THE SERVICE CONNECTION. THEREFORE, AFTER THE WATER DEPARTMENT HAS DETERMINED THE TYPE OF BACKFLOW PROTECTION THAT IS REQUIRED AT A CONSUMER'S SERVICE CONNECTION, THE CUSTOMER IS THEN RESPONSIBLE FOR THE COSTS OF PROCUREMENT, INSTALLATION, TESTING, REPAIR AND MAINTENANCE OF SAID DEVICE.

## 4. THE CERTIFIED BACKFLOW PREVENTION ASSEMBLY TESTER

THE TESTER SHALL BE RESPONSIBLE FOR PERFORMING ACCURATE FIELD TESTS ON BACKFLOW PREVENTION ASSEMBLIES AND MAKING REPORTS OF THESE TESTS TO THE CONSUMER AND THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY ON APPROVED TEST REPORT FORMS. THE TESTER SHALL BE ABLE TO IDENTIFY AND DESCRIBE THE BASIC HYDRAULIC PRINCIPLES RELATED TO BACKFLOW PREVENTION. THE TESTER SHALL BE ABLE TO SHOW KNOWLEDGE OF PRODUCT PERFORMANCE, PRODUCT INSTALLATION, PRODUCT TESTING, DOCUMENTING AND RECORDING OF INSPECTIONS AND TESTS AND BE RESPONSIBLE FOR THE ACCURACY OF ALL TESTS AND REPORTS.

## 5. THE CONTRACTOR (PLUMBING, MECHANICAL, LAWN IRRIGATION, FIRE SPRINKLER)

THE CONTRACTOR SHALL BE FAMILIAR WITH THE ORDINANCE AND INSTALL THE APPROPRIATE BACKFLOW PREVENTION ASSEMBLY CORRECTLY AND IN A SAFE WORKING ENVIRONMENT FOR TESTING AND MAINTENANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INITIAL TESTING OF THE BACKFLOW PREVENTION ASSEMBLY AND PROVIDE NOTIFICATION TO THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY PRIOR TO ANY INSTALLATION. THE CONTRACTOR SHALL SUBMIT THE TEST REPORTS TO THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY IN A TIMELY MANNER.

### SECTION 3. IMPLEMENTATION AND ENFORCEMENT:

- 1. This Policy and these Procedures shall be implemented immediately for Backflow Prevention by Containment; in conjunction with the existing Georgia State Plumbing Codes for Backflow Prevention by Cross-Connection Control on All New Domestic Water, process Water, fire Protection, AND IRRIGATION SYSTEM INSTALLATIONS.
- 2. IMPLEMENTATION OF THIS POLICY AND THESE PROCEDURES SHALL ALSO COMMENCE IMMEDIATELY ON EXISTING INSTALLATIONS. Priority SCHEDULES SHALL BE ESTABLISHED AND EVALUATIONS MADE BY THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY FOR THE CONSUMER'S RETROFIT REQUIREMENT AT THE SERVICE-CONNECTION, BEGINNING WITH THOSE CONSUMERS WHOSE PREMISES REPRESENT THE GREATEST POTENTIAL THREAT TO THE PUBLIC POTABLE WATER THE COWETA COUNTY WATER AND SUPPLY/SYSTEM. SEWERAGE AUTHORITY, HOWEVER, SHALL NOT BE RESPONSIBLE FOR ABATEMENT OF CROSS-CONNECTIONS WHICH MAY EXIST WITHIN A CONSUMER'S PREMISES. AS A MINIMUM. THE EVALUATION SHALL CONSIDER: THE EXISTENCE OF CROSS-CONNECTIONS; THE NATURE OF THE MATERIALS HANDLED ON THE PROPERTY; THE PROBABILITY OF A BACKFLOW OCCURRING; THE DEGREE OF PIPING SYSTEM COMPLEXITY; AND, THE POTENTIAL FOR SYSTEM MODIFICATION.
- З. CERTIFICATE OF PLUMBING CODE COMPLIANCE (AS PERTAINING TO BACKFLOW PREVENTION): MUST BE PROVIDED BY THE CUSTOMER/OWNER IN ORDER TO DOWNGRADE FROM MAXIMUM RPZ PROTECTION AT THE SERVICE CONNECTION. THE COWETA COUNTY CHIEF BUILDING INSPECTOR MUST CONDUCT A COMPLIANCE INSPECTION REPORT ON THE TOTAL PREMISES TO INSURE THAT PROPER BACKFLOW PREVENTION IS IN PLACE AS REQUIRED BY THE COWETA COUNTY PLUMBING CODE. THE MINIMUM ALLOWABLE PROTECTION AT THE SERVICE CONNECTION SHALL BE CONTINGENT UPON THE FOLLOWING ANNUAL REQUIREMENTS:
  - A. THE COWETA COUNTY CHIEF BUILDING INSPECTOR WILL COMPLETE A COMPLIANCE INSPECTION REPORT ON ANY PLUMBING CHANGES MADE TO ASSURE THAT THE TOTAL PREMISES HAS ACHIEVED PROPER

BACKFLOW PROTECTION AS REQUIRED BY THE COWETA COUNTY PLUMBING CODE.

- B. A CURRENT DEVICE TEST REPORT HAS BEEN FURNISHED AT THE TIME OF INSPECTION FOR EACH EXISTING BACKFLOW PREVENTER.
- C. BACKFLOW PREVENTION DEVICES THAT WERE NOT IN PLACE AT THE TIME OF COMPLIANCE INSPECTION HAVE BEEN INSTALLED AND DEVICE TEST REPORTS SUBMITTED BY THE CUSTOMER/OWNER.
- D. SUBMIT CERTIFICATE OF COMPLIANCE AND DEVICE TEST REPORTS ANNUALLY TO THE COWETA COUNTY WATER DEPARTMENT BACKFLOW PREVENTION SECTION.
- 4. REQUEST FOR VARIANCE; FROM THE REQUIREMENTS TO INSTALL AN APPROVED DOUBLE DETECTOR CHECK (DDC) BACKFLOW PREVENTER ON A FIRE SERVICE-CONNECTION, DESIGNATED FOR FIRE PROTECTION USE ONLY, MAY BE GRANTED FOR AN EXISTING SERVICE CONNECTION ONLY, AND IS CONTINGENT UPON THE FOLLOWING:
  - A. The service connection has an existing operable Single Detector Check Valve, and system has less than 1000 feet of yard piping with two (2) or less Fire Hydrants.
  - B. ALL INTERVENING CONNECTIONS SERVING PUMPS, HOSE CABINETS, STANDPIPE AND/OR SPRINKLER SYSTEMS ARE PROTECTED BY AN APPROVED BACKFLOW PREVENTER AS REQUIRED BY THE TYPE HAZARD(S) INVOLVED.
  - C. DEVICE TEST REPORTS MUST BE SUBMITTED <u>ANNUALLY</u> TO THE COWETA COUNTY WATER DEPARTMENT, BACKFLOW-PREVENTION SECTION FOR BACKFLOW-PREVENTION DEVICE(S) EXISTING AND FOR ANY FUTURE ADDITION(S).
- 5. **ENFORCEMENT OF THIS POLICY AND THESE PROCEDURES** SHALL BE ADMINISTERED BY THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY, UTILIZING ITS STAFF IN COOPERATION WITH THOSE OF THE BUILDING INSPECTION, ENVIRONMENTAL HEALTH, AND FIRE DEPARTMENTS OF COWETA COUNTY AS AUTHORIZED BY THE COWETA COUNTY

BOARD OF COMMISSIONERS.

6. PENALTIES; ANY PERSON VIOLATING ANY PROVISION OF THIS POLICY AND PROCEDURE SHALL BE LIABLE FOR A PENALTY OF NOT MORE THAN ONE THOUSAND DOLLARS (\$1,000.00) PER DAY, BY SENTENCE OF IMPRISONMENT NOT EXCEEDING SIXTY (60) DAYS IN JAIL OR BOTH FINE AND JAIL. ANY PERSON FOUND IN VIOLATION OF THESE PROVISIONS SHALL ALSO PAY ALL COSTS AND EXPENSES INVOLVED IN THE CASE OVER AND ABOVE ANY FINE IMPOSED. EACH DAY SHALL CONSTITUTE A SEPARATE OFFENSE.

### SECTION 4. INSPECTION OF FACILITIES:

- 1. THE CONSUMER, UPON REQUEST, SHALL FURNISH TO THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY, ANY PERTINENT INFORMATION REGARDING THE CONSUMER'S WATER SYSTEM ON SUCH PREMISES WHERE BACKFLOW AND/OR BACKSIPHONAGE ARE DEEMED POSSIBLE THROUGH UNCONTROLLED PLUMBING CONNECTIONS AND/OR CROSS-CONNECTIONS.
- 2. NOTHING HEREIN SHALL RELIEVE THE CONSUMER OF THE RESPONSIBILITY FOR CONDUCTING OR CAUSING TO BE CONDUCTED PERIODIC SURVEYS OF WATER-USE PRACTICES ON HIS PREMISES TO DETERMINE WHETHER THERE ARE ACTUAL POTENTIAL UNCONTROLLED OR CROSS-CONNECTIONS WITHIN THE CONSUMER'S WATER SYSTEM THROUGH WHICH CONTAMINANTS OR POLLUTANTS COULD FLOW BACK INTO HIS OWN OR COWETA COUNTY'S PUBLIC POTABLE WATER SUPPLY/SYSTEM. IF THE PREMISES IS CLASSIFIED RESTRICTED OR HIGH SECURITY WITH NO ADMITTANCE, MAXIMUM (RPZ) PROTECTION AT THE SERVICE-CONNECTION IS REQUIRED.
- З. FACILITIES CONSIDERED TO POSE AN ACTUAL OR POTENTIAL CONTAMINATION AND/OR POLLUTION THREAT TO THE SYSTEM'S PUBLIC Potabi f WATER WATER SUPPLY/SYSTEM WILL BE SUBJECT TO INSPECTION BY AN AUTHORIZED REPRESENTATIVE(S) OF THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY AND. WHEN DEEMED NECESSARY. ACCOMPANIMENT WITH IN A REPRESENTATIVE(S) FROM THE BUILDING INSPECTION. HEALTH. AND/OR FIRE DEPARTMENTS. INSPECTIONS WILL FOCUS ON PLUMBING OUTLETS AND POTENTIAL CONTAMINATING OR POLLUTING SUBSTANCES WITHIN A INSPECTIONS WILL BE SCHEDULED AT A TIME FACILITY. MUTUALLY AGREEABLE WITH THE CONSUMER'S REPRESENTA-TIVE AND THE COWETA COUNTY REPRESENTATIVE(S). USING GATHERED. THE Water SYSTEM'S INFORMATION REPRESENTATIVE WILL DETERMINE THE DEGREE OF POTENTIAL BACKFLOW HAZARD AND SPECIFY THE TYPE OF BACKFLOW PROTECTION REQUIRED AT THE CONSUMER'S SERVICE-CONNECTION.
- 4. IF, UPON INSPECTION, A FACILITY IS FOUND NOT TO BE IN FULL COMPLIANCE WITH THE PLUMBING CODE, MAXIMUM PROTECTION WILL BE REQUIRED. IF THE OWNER BRINGS THE FACILITY UP TO FULL CODE COMPLIANCE WITHIN A NINETY

(90) DAY PERIOD, MINIMUM PROTECTION WILL BE ALLOWED AT THE SERVICE-CONNECTION PROVIDED POTENTIAL HAZARDS WITHIN THE PREMISES ARE LOW.

- 5. WHILE IN THE COURSE OF A ROUTINE INSPECTION OR SPECIAL INVESTIGATION, THE INSPECTOR(S) DISCOVERS A CONDITION OF IMMINENT OR ACTUAL HIGH HAZARD SYSTEM CONTAMINATION, THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY WILL IMMEDIATELY DISCONTINUE SERVICE TO THE FACILITY. SERVICE WILL NOT BE RESTORED UNTIL THE HAZARDOUS CONDITION HAS BEEN CORRECTED AND REINSPECTED.
- 6. IN THE EVENT OF ACCIDENTAL CONTAMINATION OR POLLUTION OF THE PUBLIC POTABLE WATER SUPPLY/SYSTEM, THE CONSUMER, IF HE IS SO AWARE, SHALL **IMMEDIATELY NOTIFY** THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY SO THAT APPROPRIATE MEASURES MAY BE TAKEN TO CONTAIN AND ISOLATE THE CONTAMINANT OR POLLUTANT.
- 7. AFTER REASONABLE NOTICE TO THE CONSUMER, OF A VIOLATION OF THIS POLICY AND/OR PROCEDURE EXISTING ON THE PREMISES, WATER SERVICE MAY BE DISCONTINUED, AND ANY OTHER SUCH PRECAUTIONARY MEASURES TAKEN THAT ARE DEEMED NECESSARY TO PROTECT THE QUALITY OF THE WATER IN THE COWETA COUNTY WATER SYSTEM. WATER SERVICE SHALL NOT BE RESTORED UNTIL THE DANGER HAS BEEN ELIMINATED IN COMPLIANCE WITH THE PROVISIONS OF THIS PROCEDURE.

## SECTION 5. WATER FROM OTHER SOURCES AND FIRE HYDRANTS:

- 1. WHEN ANY PREMISES IS SERVED BY THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY, AND THE OWNER OF SAID PREMISES CONTINUES TO HAVE A WELL OR ANY OTHER SOURCE OF WATER, IT SHALL BE IN VIOLATION OF THESE PROCEDURES FOR THE PLUMBING ON SAID PREMISES TO BE INSTALLED OR SO INTERCONNECTED THAT WATER IN THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY AND THE PRIVATE WATER SUPPLY CAN, IN ANY WAY, BECOME INTERMINGLED.
- 2. Upon DISCOVERY OF AN UNCONTROLLED INTERCONNECTION ON ANY PREMISES BEING FURNISHED WATER THROUGH THE COUNTY WATER SYSTEM, AS IN ITEM (1) ABOVE, THE OWNER OF SAID PREMISES SHALL BE NOTIFIED THAT THE INTERCONNECTION MUST BE REMOVED OR CONTROLLED BY A BACKFLOW- PREVENTION DEVICE WITHIN THIRTY (30) DAYS, AND THAT FAILURE TO REMOVE OR CORRECT THE INTERCONNECTION WILL RESULT IN REMOVAL OF THE METER. IF THE CORRECTION IS NOT MADE WITHIN THE THIRTY (30) DAY PERIOD, THE METER WILL BE REMOVED AND WILL NOT BE REINSTALLED UNTIL THE MAXIMUM-TYPE BACKELOW PROTECTION IS INSTALLED AT THE SERVICE-CONNECTION, AND THE OWNER HAS PAID FOR ALL ASSOCIATED COSTS.
- 3. BOOSTER PUMPS INSTALLED ON THE SERVICE LINE TO OR WITHIN ANY PREMISES, MUST BE APPROVED AND PERMITTED BY THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY, AND SUCH PERMITTED PUMPS SHALL BE EQUIPPED WITH A LOW-PRESSURE CUT-OFF DEVICE DESIGNED TO SHUT OFF THE BOOSTER PUMP WHEN THE PRESSURE IN THE SERVICE LINE ON THE SUCTION SIDE OF THE PUMP DROPS TO 20 PSI OR BELOW. IT SHALL BE THE DUTY OF THE WATER CONSUMER TO MAINTAIN THEIR LOW-PRESSURE CUT-OFF DEVICE IN PROPER WORKING ORDER AT ALL TIMES AND TO CERTIFY TO THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY, AT LEAST ONCE A YEAR THAT THE DEVICE IS OPERABLE.

NOTE: CONSUMER SHALL ASSUME ALL LIABILITIES.

4. TANKS, TANKER TRUCKS, SEED SPRAYING TRUCKS, AND OTHER CONTAINERS THAT WILL BE FILLED WITH WATER OBTAINED UNDER THE "FIRE HYDRANT WATER USE PERMIT" POLICY MUST BE INSPECTED, APPROVED, AND PERMITTED BY THE COWETA COUNTY WATER AND SEWER AUTHORITY FOR THE PERMANENT INSTALLATION OF AN APPROVED AIR GAP OR REDUCED PRESSURE ZONE BACKFLOW-PREVENTION DEVICE PRIOR TO ISSUANCE OF THE FIRE HYDRANT WATER USE PERMIT. IN ADDITION, CONNECTING HOSES, ETC., TO A FIRE HYDRANT FOR PURPOSES OTHER THAN FILLING AN APPROVED TANK OR TANK TRUCK SHALL ALSO INCLUDE, AS A MINIMUM, A PRIOR APPROVED AND INSPECTED DOUBLE CHECK VALVE BACKFLOW PREVENTER.

(SEE ILLUSTRATION: FIGURE 6 APPENDIX).

### SECTION 6. SELECTION OF DEVICES

- 1. VACUUM BREAKERS AND BACKFLOW PREVENTERS SHALL BE SELECTED ON BASIS OF THE IMPURITIES INVOLVED AND THE TYPE CROSS-CONNECTION. THE IMPURITIES SHALL BE CONTAMINANTS (HAZARDOUS) CLASSIFIED AS AND (NON-HAZARDOUS): THE POLLUTANTS TYPE CROSS-CONNECTION BY WHETHER IT IS NON-PRESSURE OR PRESSURE AS FOLLOWS: (SEE TERMINOLOGY: APPENDIX).
  - (A) CROSS-CONNECTION, NON-PRESSURE TYPE: This type of connection, when not protected by a minimum air gap, shall be protected by an appropriate vacuum breaker or an appropriate backflow preventer (BFP).
  - (B) CROSS-CONNECTION PRESSURE TYPE: THIS TYPE CONNECTION SHALL BE PROTECTED BY AN APPROPRIATE BFP ONLY.

CAUTION: A PRESSURE VACUUM BREAKER SHALL NOT BE USED ALONE ON A PRESSURE-TYPE CROSS-CONNECTION.

- NOTE: BECAUSE AN IRRIGATION SYSTEM SERVES AN ENVIRONMENT THAT IS OPEN TO ATMOSPHERE. WOULD NOT BE CLASSIFIED IT AS A PRESSURE-TYPE CROSS-CONNECTION. HOWEVER, DUE TO THE SPECIAL NATURE OF THE INSTALLATION, MINIMUM PROTECTION AGAINST BACKFLOW SHALL INCLUDE A DOUBLE CHECK VALVE BACKFLOW PREVENTER. IF CHEMICALS ARE INJECTED INTO THE SYSTEM, MINIMUM PROTECTION SHALL INCLUDE A REDUCED ZONE BACKFLOW PRESSURE PREVENTER. SECTION 608.16.5, GEORGIA STATE PLUMBING CODE.
- 2. VACUUM BREAKERS SHALL BE CORROSION RESISTANT. OTHER BACKFLOW-PREVENTION DEVICES, INCLUDING ACCESSORIES, COMPONENTS, AND FITTINGS IN SIZES 2 INCH AND SMALLER SHALL BE BRONZE WITH THREADED CONNECTIONS. SIZES 2-1/2 INCH AND LARGER SHALL BE BRONZE, OR FUSED EPOXY-COATED IRON INSIDE AND OUT, OR GALVANIZED IRON, WITH FLANGED CONNECTIONS.
- 3. EACH DEVICE SHALL HAVE A BRASS IDENTIFICATION TAG,

SECURELY ATTACHED WITH CORROSION-RESISTANT MECHANICAL FASTENERS, AND INCLUDE THE MANUFACTURER'S NAME, SERIAL NUMBER, AND MAXIMUM WORKING PRESSURE AND TEMPERATURE.

### SECTION 7. APPROVAL OF DEVICES:

ALL BACKFLOW-PREVENTION DEVICES SHALL BE APPROVED IN ACCORDANCE WITH THE APPLICABLE STANDARD OF THE AMERICAN SOCIETY OF SANITARY ENGINEERING, THE AMERICAN NATIONAL STANDARDS INSTITUTE, THE AMERICAN WATER WORKS ASSOCIATION, THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS- CONNECTION CONTROL AND HYDRAULIC RESEARCH, AND THE GEORGIA STATE PLUMBING CODE.

EXCEPTION: IF NO STANDARD YET EXISTS FOR A PARTICULAR DEVICE, OR IF THE DEVICE IS A DERIVATIVE OF ONE COVERED BY A NATIONAL STANDARD, THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY SHALL DETERMINE WHETHER THE DEVICE WILL BE ALLOWED.

### SECTION 8. LOCATION AND INSTALLATION OF DEVICES:

- 1. LOCATION OF ALL BACKFLOW-PREVENTION DEVICES SHALL BE IN AN AREA THAT PROVIDES A SAFE WORKING ENVIRONMENT FOR TESTING AND MAINTENANCE. THIS AREA SHALL BE READILY ACCESSIBLE AND FREE FROM EXTREME COLD, HEAT, AND/OR ELECTRICAL HAZARDS.
- 2. INSTALLATION OF ALL BACKFLOW-PREVENTION DEVICES SHALL BE IN ACCORDANCE WITH THE GEORGIA STATE PLUMBING CODE, THE FOLLOWING PROCEDURES, AND OTHER APPLICABLE CODES AND REGULATIONS. INSTALLATIONS FOR CONTAINMENT SHALL BE BY A DULY LICENSED PLUMBING, MECHANICAL, AND/OR UTILITY CONTRACTOR; AND AS APPROVED BY THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY:
  - (A) WHEN A DUAL OR DOUBLE CHECK VALVE BACKFLOW PREVENTER IS USED IN THE CONTAINMENT CONCEPT, IT SHALL BE INSTALLED AT OR AS CLOSE TO THE SERVICE-CONNECTION AS PRACTICAL, IN AN APPROVED METER BOX OR COVERED VAULT.
  - (B) WHEN A REDUCED PRESSURE ZONE BACKFLOW PREVENTER IS INSTALLED AT THE SERVICE-CONNECTION IT SHALL BE ABOVE GROUND IN A STRUCTURE THAT IS PROTECTED FROM FREEZING. IN LIEU OF THE ABOVE-GROUND INSTALLATION AT THE SERVICE-CONNECTION. AND AT THE OWNER'S REQUEST. THE WATER PURVEYOR AND THE PLUMBING OFFICIAL MAY ALLOW THE RPZ TO BE INSTALLED IMMEDIATELY INSIDE THE BUILDING, IN WHICH CASE THE DEVICE WOULD REMAIN UNDER THE JURISDICTION OF THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY AND SUBJECT TO INSPECTIONS, AND TESTING BY ITS AUTHORIZED REPRESENTATIVE.

**NOTE:** WHEN A BACKFLOW PREVENTER IS INSTALLED IN A SERVICE PIPE INSIDE A STRUCTURE ON ANY PREMISES FOR THE PURPOSE OF CONTAINING SAID PREMISES, IT SHALL BE UNLAWFUL TO TAP INTO SUCH SERVICE PIPE BETWEEN THE BFP AND THE SERVICE-CONNECTION. ANY BRANCH CONNECTION(S) SERVICE EXISTING PIPE SHALL ON AN BE PERMANENTLY DISCONNECTED OR EQUIPPED WITH A BACKFLOW PREVENTER(S) COMMENSURATE WITH THE DEGREE(S) OF HAZARD. SECTION 608.6 GEORGIA STATE PLUMBING CODE.

- 3. FACILITIES THAT MUST HAVE CONTINUOUS UNINTERRUPTED WATER SUPPLY SHALL INSTALL BACKFLOW-PREVENTION DEVICES IN PARALLEL FOR TESTING AND MAINTENANCE PURPOSES. IN NO CASE SHALL A BYPASS ARRANGEMENT BE INSTALLED OR MAINTAINED UNLESS ALSO EQUIPPED WITH AN APPROVED BACKFLOW-PREVENTION DEVICE. (SEE ILLUSTRATION: FIGURE 9 APPENDIX).
- 4. VACUUM BREAKERS AND BACKFLOW PREVENTERS EQUIPPED WITH ATMOSPHERIC VENTS OR WITH RELIEF OPENINGS, SHALL BE SO INSTALLED AND SO LOCATED AS TO PREVENT ANY VENT OR ANY RELIEF OPENING FROM BEING SUBMERGED. THEY SHALL BE INSTALLED IN THE POSITION AS RECOMMENDED BY THE MANUFACTURER, AND AS PRESCRIBED IN THE FOLLOWING:
  - (A) VACUUM BREAKER, ATMOSPHERIC TYPE (AVB): This device shall be at least 6 inches above the highest outlet or the overflow level on the nonpotable system. It shall be installed downstream of the last shut-off valve. (See Illustration: Figure 2 Appendix).
  - (B) VACUUM BREAKER, PRESSURE TYPE (PVB): THIS DEVICE SHALL BE INSTALLED AT LEAST 12 INCHES ABOVE THE HIGHEST OUTLET OR THE OVERFLOW LEVEL ON THE NONPOTABLE SYSTEM. IT MAY BE INSTALLED UPSTREAM OF THE LAST SHUT-OFF VALVE. (SEE ILLUSTRATION: FIGURE 3 APPENDIX).

- (C) VACUUM BREAKER, HOSE TYPE (HVB): THIS DEVICE SHALL BE INSTALLED DIRECTLY ON THE HOSE THREADS, IF NOT AN INTEGRAL PART OF THE VALVE. IT MAY NOT BE SUBJECTED TO CONTINUOUS PRESSURE, STATIC OR FLOWING. NOR SHALL IT BE ATTACHED TO A FREEZELESS-TYPE HYDRANT UNLESS IT IS A MODEL SPECIFICALLY DESIGNED FOR THE SERVICE.
- (D) BACKFLOW PREVENTER, DUAL CHECK (DUC): THIS ASSEMBLY SHALL NOT BE BURIED IN EARTH, BUT MAYBE INSTALLED BELOW GRADE AS IN A METER BOX.
   A POSITIVE SHUT-OFF VALVE AND UNION SHALL BE NEAR THE INLET AND OUTLET SIDES.

**EXCEPTION:** WHEN THE DEVICE IS ATTACHED DIRECTLY TO A METER, AND BOTH ARE INTENDED TO BE REMOVED AS A UNIT, ONE UNION IS REQUIRED ON THE DEVICE. EXCEPT WHEN A METER OR OTHER DEVICE WITH BRONZE STRAINER, INTEGRAL OR ATTACHED, IS IMMEDIATELY UPSTREAM OF THE BACKFLOW PREVENTER, A BRONZE STRAINER SHALL BE PROVIDED BETWEEN THE INLET SHUT-OFF AND THE DEVICE.

(E) BACKFLOW PREVENTER. DOUBLE CHECK VALVE (DCV): This device shall not be buried in EARTH BUT MAY BE INSTALLED BELOW GROUND IN A PIT PROVIDED BALL VALVE TEST COCKS FITTED WITH BRASS PLUGS ARE USED. ASSEMBLY BOLTS ON BRONZE DCV'S INSTALLED IN PITS SHALL BE RESISTANT TO ELECTROLYSIS. A FULL-PORT BALL VALVE IN SIZES THROUGH 2 INCH, AND A BALL OR RESILIENT-SEATED BALL VALVE IN SIZES ABOVE 2 INCH. SHALL BE NEAR THE INLET AND OUTLET SIDES OF THE DEVICE. THE DEVICE SHALL BE PROVIDED WITH FOUR BALL VALVE TEST COCKS. THE FIRST TEST COCK SHALL BE PROVIDED ON THE UPSTREAM SIDE OF THE INLET SHUT-OFF VALVE. WHEN BELOW GROUND, A UNION OR FLANGE SHALL BE NEAR THE INLET AND OUTLET SIDES. NO INTERVENING CONNECTION(S) SHALL BE BETWEEN THE SHUT-OFF VALVES AND THE BACKFLOW PREVENTER. EXCEPT WHEN A METER OR OTHER DEVICE WITH BRONZE STRAINER, INTEGRAL OR ATTACHED, IS IMMEDIATELY UPSTREAM OF THE BACKFLOW PREVENTER, A BRONZE STRAINER SHALL BE PROVIDED BETWEEN THE INLET SHUT-OFF VALVE AND THE DEVICE ON SIZES THROUGH 2 INCH. WHEN USED ON SIZES LARGER THAN 2 INCH, THE STRAINER SHALL BE OF THE SAME MATERIAL AS THE DEVICE. (SEE ILLUSTRATION: FIGURE 4 APPENDIX).

- (F) BACKFLOW PREVENTER WITH INTERMEDIATE ATMOSPHERIC VENT (IAV): THIS DEVICE SHALL NOT BE INSTALLED BELOW GROUND. WHERE RELIEF VALVE DISCHARGE COULD CAUSE WATER DAMAGE, IT SHALL BE PIPED VIA AN AIR GAP, OR A FUNNEL, AT THE VENT/RELIEF PORT TO A FLOOR DRAIN OR OTHER APPROVED LOCATION. A POSITIVE SHUT-OFF VALVE AND UNION SHALL BE NEAR THE INLET AND OUTLET SIDES OF THE DEVICE. STRAINER TO BE INCLUDED AS IN PARAGRAPH (D) ABOVE.
- (G) BACKFLOW PREVENTER, REDUCED PRESSURE ZONE (RPZ): THIS DEVICE SHALL NOT BE INSTALLED BELOW GROUND. WHERE RELIEF VALVE DISCHARGE COULD CAUSE WATER DAMAGE, IT SHALL BE PIPED VIA AN AIR GAP, OR A FUNNEL, AT THE VENT/RELIEF PORT TO A FLOOR DRAIN OR OTHER APPROVED LOCATION. POSITIVE SHUT-OFF VALVES, TEST COCKS, AND STRAINER ARE TO BE PROVIDED AS IN PARAGRAPH (E) ABOVE. NO INTERVENING BRANCH CONNECTION(S) SHALL BE BETWEEN THE SHUT-OFFS AND THE BACKFLOW PREVENTER. (SEE ILLUSTRATION: FIGURE 5 APPENDIX).

NOTE: WHEN A REDUCED PRESSURE ZONE DEVICE IS INSTALLED IN A LINE SUBJECT TO PERIODIC NO-FLOW CONDITIONS, AND SUPPLY PRESSURE SUBJECT TO FLUCTUATIONS. AN AUXILIARY DIRECTIONAL CHECK WITH SOFT DISC, CAPABLE OF FUNCTIONING IN ANY POSITION WITH THE BFP MAY BE INSTALLED, IT SHALL BE PROVIDED BETWEEN THE INLET SHUT-OFF VALVE AND THE BFP HEAD TO LOCK THE SUPPLY PRESSURE IN. AND PREVENT UNNECESSARY DISCHARGE THROUGH THE VENT/RELIEF PORT. MAKE-UP LINES TO CHILLED WATER SYSTEMS AND HEATING SYSTEMS ARE HYDRONIC EXAMPLES OF INSTALLATIONS WHERE A DROP IN SUPPLY PRESSURE MAY OCCUR DURING NO-FLOW CONDITIONS. WHEN A WATER PRESSURE REDUCING VALVE IS REQUIRED IN THE SAME LINE WITH THE RPZ DEVICE, IT IS USUALLY POSSIBLE TO LOCATE THE REDUCING VALVE UPSTREAM OF THE DEVICE AND TAKE ADVANTAGE OF THE CHECK VALVE EFFECT OF THE REDUCING VALVE. IN SUCH CASE. THE AUXILIARY DIRECTIONAL CHECK WOULD NOT BE REQUIRED.

#### \*\*\*\* SPECIAL CAUTION \*\*\*\*

THERMAL EXPANSION - WHEN WATER IS HEATED AND STORED IN A DISTRIBUTION SYSTEM OR A BRANCH OF THE SYSTEM THAT CLOSED HAS BEEN BY THE INSTALLATION OF А BACKFLOW-PREVENTION DEVICE OR ANY OTHER CHECKING DEVICE, AN APPROVED AUXILIARY RELIEF VALVE, OR EXPANSION CHAMBER SHALL BE INSTALLED TO LIMIT THERMAL EXPANSION OF THE WATER BEING HEATED TO NOT MORE THAN 80 PSI NO-FLOW PRESSURE AT ANY FIXTURE ON THE SYSTEM. SECTION 607.3 OF THE GEORGIA STATE PLUMBING CODE.

### SECTION 9. FIRE PROTECTION SYSTEMS:

- 1. FOR PURPOSES OF BACKFLOW-PREVENTION BY CONTAINMENT, IF THE SERVICE-CONNECTION TO A PREMISES; FROM THE COWETA COUNTY WATER SEWER AUTHORITY POTABLE WATER SUPPLY/SYSTEM, IS INTENDED TO BE USED FOR FIRE PROTECTION SERVICE IT SHALL BE CLASSIFIED AND/OR DEFINED AS FOLLOWS:
  - (A) **DEDICATED SERVICE-CONNECTION** ONE THAT IS DESIGNATED TO SUPPLY POTABLE WATER FOR FIRE PROTECTION SERVICE ONLY.
  - (B) **COMBINATION SERVICE-CONNECTION** ONE THAT IS DESIGNATED TO SUPPLY POTABLE WATER FOR BOTH DOMESTIC USE AND FIRE PROTECTION SERVICE.
- 2. TO FURTHER ASSOCIATE THE SOURCES OF WATER THAT MAY BE USED FOR FIRE PROTECTION AND CLASSES OF FIRE PROTECTION SYSTEMS, THE FOLLOWING GEORGIA STATE FIRE CODE CLASSES SHALL ALSO APPLY FOR BACKFLOW-PREVENTION BY CONTAINMENT: (SEE ILLUSTRATIONS: FIGURES 8-1 THROUGH 8-6 APPENDIX)

**CLASS 1** - DIRECTLY SUPPLIED FROM PUBLIC WATER MAINS ONLY; NO PUMPS, TANKS, OR RESERVOIRS; NO PHYSICAL CONNECTION FROM OTHER WATER SUPPLIES; NO ANTIFREEZE OR ADDITIVES OF ANY KIND; ALL SPRINKLER DRAINS DISCHARGING TO ATMOSPHERE, DRY WELLS OR OTHER SAFE OUTLETS.

**CLASS 2** - DIRECTLY SUPPLIED FROM PUBLIC WATER MAINS, SAME AS CLASS L, EXCEPT THAT AUTHORIZATION HAS BEEN OBTAINED FOR A BOOSTER PUMP TO BE INSTALLED IN THE SUPPLY LINE.

NOTE: MUST HAVE SPECIAL APPROVAL AND BE PERMITTED BY THE COWETA COUNTY WATER DEPARTMENT. (REFER. SECTION 5, PARA. 3)

**CLASS 3** - DIRECTLY SUPPLIED FROM PUBLIC WATER MAINS, SAME AS CLASS L, PLUS ONE OR MORE OF THE FOLLOWING: ELEVATED STORAGE TANKS OR PRESSURE TANKS; FIRE PUMPS TAKING SUCTION FROM ABOVE GROUND COVERED RESERVOIRS OR TANKS. ALL STORAGE FACILITIES SHALL BE FILLED FROM THE POTABLE WATER SUPPLY AND MAINTAINED IN A POTABLE CONDITION. **CLASS 4** - DIRECTLY SUPPLIED FROM PUBLIC WATER MAINS, SIMILAR TO CLASSES 1 AND 2, AND WITH AN AUXILIARY WATER SUPPLY ON OR AVAILABLE TO THE PREMISES; OR AN AUXILIARY WATER SUPPLY LOCATED WITHIN APPROXIMATELY 1,700 FEET OF THE PUMPER CONNECTION.

**CLASS 5** - DIRECTLY SUPPLIED FROM PUBLIC WATER MAINS, AND INTERCONNECTED WITH AUXILIARY SUPPLIES, SUCH AS: PUMPS TAKING SUCTION FROM RESERVOIRS EXPOSED TO CONTAMINATION, OR RIVERS AND PONDS; DRIVEN WELLS; MILLS OR OTHER INDUSTRIAL WATER SYSTEMS; OR WHERE ANTIFREEZE OR ADDITIVES ARE USED.

**CLASS 6** - DIRECTLY SUPPLIED FROM PUBLIC WATER MAINS ONLY, WITH OR WITHOUT GRAVITY STORAGE OR PUMP SUCTION TANKS, AND/OR INTERCONNECTIONS WITH INDUSTRIAL SYSTEMS.

3. The following terminology and definitions for types of fire protection systems shall also be applicable;

(A) **SPRINKLER SYSTEM** - INCLUDES EXPRESS RISER PIPES THAT CONVEY WATER TO THE LATERALS THAT SUPPLY SPRINKLER HEADS.

(B) **STANDPIPE SYSTEM** - INCLUDES BULK RISER PIPES EQUIPPED WITH HOSE CONNECTIONS, USUALLY AT EACH FLOOR AND ROOF, FOR EXCLUSIVE USE BY THE FIRE DEPARTMENT; PLUS LATERALS ON EACH FLOOR OF CERTAIN FACILITIES THAT SUPPLY WATER TO HOSE CABINETS FOR USE BY THE OCCUPANTS TO CONTROL INCIPIENT FIRES UNTIL THE FIRE DEPARTMENT ARRIVES.

(C) **COMBINED SYSTEM** - INCLUDES BULK AND EXPRESS RISER PIPES THAT SUPPLY BOTH SPRINKLER AND STANDPIPE SYSTEMS.

## 4. FIRE SYSTEMS SHALL BE FURTHER CLASSIFIED AND DEFINED AS:

(A) NONHAZARDOUS - CONTAINING IMPURITIES CLASS 3 AND LOWER.

ALSO SEE, TERMINOLOGY FOR POLLUTANT - APPENDIX.

(B) **HAZARDOUS** - CONTAINING IMPURITIES CLASS 4 AND HIGHER.

ALSO SEE, TERMINOLOGY FOR CONTAMINANT - APPENDIX B.

5. FIRE PROTECTION SYSTEMS AS DEFINED BY THE GEORGIA STATE FIRE CODE SHALL BE CONTAINED FROM THE COWETA COUNTY WATER AUTHORITY'S WATER SUPPLY/SYSTEM BY BACKFLOW-PREVENTION DEVICES AS INDICATED AND THAT HAVE APPROVALS AS REQUIRED UNDER SECTION VII OF THIS PROCEDURE AND CLASSIFIED OR LISTED BY THE UNDERWRITERS LABORATORIES AND FACTORY MUTUAL INSURANCE, AS FOLLOWS:

CLASS 1, 2 AND 3 SPRINKLER SYSTEMS, AND NONHAZARDOUS STANDPIPE OR COMBINED SYSTEMS: SHALL BE CONTAINED BY THE INSTALLATION OF A DOUBLE DETECTOR CHECK BACKFLOW PREVENTER.

CLASS 4, 5 AND 6 SPRINKLER SYSTEMS, AND HAZARDOUS STANDPIPE OR COMBINED SYSTEMS: SHALL BE CONTAINED BY THE INSTALLATION OF A REDUCED PRESSURE ZONE DETECTOR CHECK BACKFLOW PREVENTER.

CLASS SYSTEMS WITH COMBINATION HAZARDS: SHALL BE CONTAINED FROM THE PUBLIC WATER MAINS BY PROCEDURES APPLICABLE TO THE COMPONENT THAT REQUIRES THE HIGHER DEGREE OF PROTECTION.

6. The purpose of certain checking devices used, or Likely to be used, with fire protection systems is outlined below to call attention to those that are Approved for use as backflow-prevention devices and those that are not.

(A) **DIRECTIONAL CHECK** - TO PROVIDE DIRECTIONAL FLOW ONLY. **NOT** AN APPROVED BACKFLOW-PREVENTION DEVICE.

(B) **ALARM CHECK** - TO SIGNAL AN ALARM; TO SUMMON THE FIRE DEPARTMENT, ETC., WHEN A SPRINKLER HEAD FLOWS WATER; AND, ON WET-PIPE SYSTEMS, TO PROVIDE DIRECTIONAL FLOW. **NOT** AN APPROVED BACKFLOW-PREVENTION DEVICE.

(C) **SINGLE DETECTOR CHECK** - TO DETECT UNAUTHORIZED USE OF WATER FOR OTHER THAN FIRE SERVICE; TO DETECT LEAKS IN FIRE PROTECTION SYSTEMS; AND, WITH BY-PASS CHECK, TO PROVIDE DIRECTIONAL FLOW. **NOT** AN APPROVED BACKFLOW PREVENTER.

(D) DOUBLE CHECK VALVE (DCV) - TO PREVENT

BACKFLOW OF POLLUTED WATER INTO A POTABLE WATER SUPPLY/SYSTEM; AND TO PROVIDE DIRECTIONAL FLOW. **APPROVED** FOR USE WITH FULL SERVICE MASTER OR FM METERS ON A COMBINATION SERVICE CONNECTION ONLY.

(E) **DOUBLE DETECTOR CHECK (DDC)** - TO PREVENT BACKFLOW OF POLLUTED WATER FROM A FIRE PROTECTION SYSTEM INTO A POTABLE WATER SUPPLY/SYSTEM; TO DETECT UNAUTHORIZED USE OF WATER; TO DETECT LEAKS IN THE FIRE PROTECTION SYSTEM; AND, TO PROVIDE DIRECTIONAL FLOW. **APPROVED** FOR USE ON A DEDICATED SERVICE CONNECTION.

(F) **REDUCED PRESSURE ZONE CHECK (RPZ)** - TO PREVENT BACKFLOW OF CONTAMINATED WATER INTO A POTABLE WATER SUPPLY/SYSTEM; AND TO PROVIDE DIRECTIONAL FLOW. **APPROVED** FOR USE ON A COMBINATION SERVICE AS IN ITEM (D).

(G) **REDUCED PRESSURE DETECTOR CHECK (RPDC)**-TO PREVENT BACKFLOW OF CONTAMINATED WATER FROM A FIRE PROTECTION SYSTEM INTO A POTABLE WATER SUPPLY/SYSTEM; TO DETECT UNAUTHORIZED USE OF WATER; TO DETECT LEAKS IN THE FIRE PROTECTION SYSTEM; AND TO PROVIDE DIRECTIONAL FLOW. **APPROVED** FOR USE ON A DEDICATED SERVICE AS IN ITEM (E).

- 7. SINGLE DETECTOR CHECKS THAT ARE USED ON NONHAZARDOUS FIRE PROTECTION SYSTEMS CLASS 1, 2 OR 3 MAY NOT BE CONSIDERED AS A COMPONENT PART OF A DDC BACKFLOW PREVENTER. SPECIFICALLY, THE ADDITION OF A SECOND SINGLE CHECK TO ONE OF THESE DEVICES MAY NOT BE SUBSTITUTED FOR A DOUBLE DETECTOR CHECK (DDC) ASSEMBLY, THAT IS APPROVED FOR BACKFLOW-PREVENTION.
- 8. IT IS INTENDED THAT THE APPROVED DOUBLE DETECTOR CHECK (DDC) BACKFLOW PREVENTER BE IN LIEU OF; NOT IN ADDITION TO, THE TWO CHECKING DEVICES ALREADY REQUIRED IN THE SUPPLY TO CLASS 1 AND 2; OR THE DOUBLE CHECK VALVE BFP ALREADY REQUIRED ON CLASS 3 NONHAZARDOUS SYSTEMS, AND THAT THE APPROVED REDUCED PRESSURE DETECTOR CHECK (RPDC) BE IN LIEU OF THE RPZ ALREADY REQUIRED ON HAZARDOUS SYSTEMS. THE ONLY ADDITIONAL CHECKING DEVICE INTENDED IS A 3/4 INCH DOUBLE CHECK VALVE (DCV) OR, REDUCED PRESSURE ZONE (RPZ) IN THE 3/4 INCH COPPER BYPASS LINE, IN CONJUNCTION WITH THE BRONZE DETECTOR METER.

9. The two shut-off valves required for periodic testing of the backflow-prevention device shall be OS&Y, FDA-approved fused epoxy coated inside and out, with resilient seats and the inlet valve shall include an approved test cock on the upstream side. All components shall be listed for fire protection service by Factory Mutual and Underwriters Laboratories.

### SECTION 10. IRRIGATION SYSTEMS

STATE OF GEORGIA PLUMBING CODE 608.16.5 CONNECTIONS TO LAWN IRRIGATION SYSTEMS

- 1. A SEPARATE METER SHALL BE REQUIRED FOR ALL LAWN IRRIGATION SYSTEMS.
- 2. THE CUSTOMER/CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND TESTING OF THE PROPER BACKFLOW PREVENTION ASSEMBLIES.
- 3. IF NO CHEMICALS ARE INTRODUCED IN THE IRRIGATION SYSTEM THEN A DOUBLE CHECK VALVE SHALL BE INSTALLED AT THE METER CONNECTION.
- 4. IF THE IRRIGATION SYSTEM HAS FERTILIZER INJECTORS THEN A REDUCE PRESSURE ZONE BACKFLOW PREVENTER RPZ SHALL BE INSTALLED AT THE METER.
- 5. RAIN SHUT OFF SWITCH ARE REQUIRED TO BE INSTALLED ON ALL IRRIGATION SYSTEMS.

### SECTION 11. TESTING, MAINTENANCE, AND REPAIRS:

- 1. ALL BACKFLOW-PREVENTION DEVICES, BOTH EXISTING AND NEW, AND ALL PARTS THEREOF, SHALL BE MAINTAINED IN A SAFE CONDITION AND IN GOOD WORKING ORDER.
- 2. THE CONSUMER SHALL BE RESPONSIBLE FOR THE COST OF TESTING, MAINTENANCE, AND REPAIR OF ALL BACKFLOW-PREVENTION DEVICES DOWNSTREAM OF THE SERVICE-CONNECTION WITHIN THE PREMISES AND ON HIS OWN PRIVATE SYSTEM.
- THE CONSUMER IS RESPONSIBLE FOR BACKSIPHONED З. CONTAMINATION AND/OR MATERIAL OR POLLUTION THROUGH BACKFLOW. AND IF CONTAMINATION OR POLLUTION OF THE COWETA COUNTY PUBLIC POTABLE WATER SUPPLY/SYSTEM OCCURS THROUGH AN ILLEGAL CROSS-CONNECTION AND/OR AN IMPROPERLY INSTALLED, MAINTAINED OR REPAIRED DEVICE, OR A DEVICE THAT HAS BEEN BYPASSED, HE IS LIABLE FOR ALL ASSOCIATED COSTS OF CLEAN-UP OF THE PUBLIC POTABLE WATER SUPPLY/SYSTEM.
- 4. TESTS, MAINTENANCE, AND REPAIRS ARE TO BE MADE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE OR MORE FREQUENTLY WHERE INSPECTIONS INDICATE A NEED OR ARE SPECIFIED IN THE MANUFACTURER'S INSTRUCTIONS:
  - (A) **FIXED AIR GAP SEPARATIONS** SHALL BE INSPECTED AT THE TIME OF INSTALLATION AND AT LEAST ANNUALLY THEREAFTER.
  - (B) **PRESSURE VACUUM BREAKERS** SHALL BE INSPECTED AND TESTED AT THE TIME OF INSTALLATION AND AT LEAST ANNUALLY THEREAFTER.
  - (C) **DUAL CHECK VALVES** SHALL BE INSPECTED AND SPOT TESTED AS DETERMINED BY THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY.
  - (D) DOUBLE CHECK VALVE BACKFLOW

**PREVENTERS** - SHALL BE INSPECTED AND TESTED AT TIME OF INSTALLATION AND AT LEAST ANNUALLY THEREAFTER.

(E) **REDUCED PRESSURE ZONE BACKFLOW PREVENTERS** - SHALL BE INSPECTED AND TESTED AT TIME OF INSTALLATION AND AT LEAST ANNUALLY THEREAFTER.

- (F) **SYNTHETIC COMPONENTS WITHIN A DEVICE** -SHALL BE REPLACED EVERY FIVE (5) YEARS, OR SOONER IF REQUIRED.
- 5. TEST PROCEDURES FOR ALL BACKFLOW-PREVENTION DEVICES SHALL BE AS OUTLINED IN THE: UNIVERSITY OF SOUTHERN CALIFORNIA, FCCCHR; MANUAL OF CROSS-CONNECTION CONTROL, LATEST EDITION. TEST CAN ONLY BE DONE BY A CERTIFIED PERSON HOLDING A CURRENT BACKFLOW PREVENTION ASSEMBLY TESTER CERTIFICATION FROM ONE OF THE FOLLOWING: GEORGIA STATEWIDE BACKFLOW PREVENTION CERTIFICATION PROGRAM, AMERICAN BACKFLOW PREVENTION ASSOCIATION, UNIVERSITY OF FLORIDA'S TREEO CENTER.
- 6. TESTING AND REPAIRS SHOULD BE DONE BY A SPECIALIST WHO IS CERTIFIED AND TRAINED TO UNDERSTAND THE DESIGN AND INTENDED OPERATION OF THE DEVICE(S) BEING TESTED AND HAS PROVEN HIS/HER COMPETENCY TO THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY. A COPY OF HIS/HER CERTIFICATE(S) MUST BE ON FILE IN THE WATER & SEWERAGE AUTHORITY OFFICE. ALL REPAIRS OR REPLACEMENTS ON A FAILED DEVICE SHALL BE DONE WITHIN 15 DAYS OF FAILURE.
- 7. A TEST AND MAINTENANCE LOG FOR EACH RPZ, DCV, DDC AND PVB DEVICE SHALL BE MAINTAINED BY THE CONSUMER. FOLLOWING EACH TEST OR REPAIR A REPORT MUST BE SENT TO THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY, AND MUST INCLUDE THE FOLLOWING INFORMATION: (SAMPLE FORM - FIGURE 7 APPENDIX).
  - (A) DATE OF INSTALLATION AND LOCATION;
  - (B) METER SERIAL NUMBER AND METER READING
  - (C) MANUFACTURER'S NAME AND SERIAL NUMBER;
  - (D) DATE OF EACH TEST OR VISUAL INSPECTION;
  - (E) OPTIONAL TEST ON THE RP IS REQUIRED
  - (F) NAME OF AUTHORIZED PERSON PERFORMING TEST;
  - (G) TEST RESULTS;
  - (H) DESCRIPTION OF REPAIRS OR SERVICING REQUIRED;
  - (I) DATE REPAIRS COMPLETED.

(J) MANUFACTURER'S NAME AND SERIAL NUMBER OF TEST KIT.

(K) OPTIONAL TEST ON THE RP IS REQUIRED

8. ALL BACKFLOW-PREVENTION DEVICES AND LOGS SHALL BE SUBJECT TO PERIODIC INSPECTION BY A REPRESENTATIVE OF THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY. IF A DEVICE IS FOUND TO BE INOPERATIVE OR MALFUNCTIONING, THE CONSUMER WILL BE GIVEN 15 DAYS TO COMPLETE CORRECTIONS REQUIRED BY THE INSPECTOR OR REPRESENTATIVE. WITH THE EXCEPTION OF THE CASES INVOLVING ACTUAL OR IMMINENT SYSTEM CONTAMINATION, THE TIME ALLOTTED FOR CORRECTIONS WILL BE DETERMINED BY THE DEGREE OF POTENTIAL HAZARD POSED TO THE PUBLIC POTABLE WATER SUPPLY SYSTEM.

9. IF THE CORRECTIVE MEASURES HAVE NOT BEEN TAKEN IN THE ALLOTTED TIME, TERMINATION OF WATER SERVICE WILL BE RECOMMENDED. IF THE GENERAL MANAGER CONCURS, THE CONSUMER WILL RECEIVE A CERTIFIED LETTER OF INTENT TO TERMINATE SERVICE. TERMINATION PROCEDURES WILL BE INITIATED TEN (10) DAYS AFTER RECEIPT. IF THE CONSUMER COMPLETES THE CORRECTIONS PRIOR TO THE DEADLINE, TERMINATION PROCEDURES WILL BE HALTED.

### SECTION 12. ADDITIONAL INFORMATION:

ANY QUESTIONS REGARDING THIS POLICY AND/OR THESE PROCEDURES MAY BE DIRECTED TO COWETA COUNTY WATER AND SEWERAGE AUTHORITY, BACKFLOW-PREVENTION SECTION, 545 CORINTH ROAD, NEWNAN GA 30263-2262. PHONE (770) 254-3710.

### CROSS CONNECTION EMERGENCY RESPONSE PLAN

ALL CUSTOMER INQUIRIES CONCERNING WATER QUALITY ARE DIRECTED TO THE DEPARTMENT OF WATER DISTRIBUTION. WHEN A COMPLAINT IS RECEIVED, IT IS EVALUATED OVER THE PHONE WITH THE CUSTOMER. IF THE COMPLAINT IS DETERMINED TO BE A POTENTIAL PROBLEM, A MEMBER OF THE DEPARTMENT OF WATER DISTRIBUTION IS DISPATCHED TO THE AREA REPORTING THE PROBLEM. ON ARRIVAL IN THE PROBLEM AREA, THE TECHNICIAN WILL:

- (A) MAKE A PRELIMINARY JUDGMENT OF THE PROBLEM BY CHECKING FOR ODOR AND APPEARANCE.
- (B) IF A CROSS CONNECTION PROBLEM IS SUSPECTED, NOTIFY THE GENERAL MANAGER IMMEDIATELY. IF THE PRELIMINARY REPORT INDICATES THE NECESSITY, FOLLOW UP PROCEDURES MAY BE ACTIVATED BY WATER DISTRIBUTION PERSONNEL BEFORE THE SAMPLES ARE RETURNED TO THE LABORATORY.
- (C) PICK UP SAMPLES AND RETURN THEM FOR LABORATORY TESTING. WHEN SAMPLES OF THE SUSPECTED WATER ARE RETURNED ΤO THE LABORATORY IMMEDIATE TESTS WILL BE MADE TO DETERMINE THE NATURE OF THE POLLUTANT OR CONTAMINANT. IF THE LIMITATIONS OF AVAILABLE TEST EQUIPMENT PREVENT IDENTIFICATION OF THE POLLUTANT, THE GA EPD WILL BE CONTACTED AND A SAMPLE DISPATCHED BY A WATER AUTHORITY COURIER FOR ADDITIONAL TESTING.

IF FOLLOW UP PROCEDURES ARE ACTIVATED, AT THIS POINT THE GENERAL MANAGER AND THE CROSS CONNECTION CONTROL SUPERVISOR ARE BOTH CONTACTED AND NOTIFIED OF THE BEGINNING WITH THE INITIAL SITUATION. **INSPECTOR'S** PRELIMINARY REPORT. THE CROSS CONNECTION CONTROL SHALL IMMEDIATELY EXAMINE SUPERVISOR THE CROSS CONNECTION CONTROL FILES TO DETERMINE POTENTIAL SOURCES OF CONTAMINATION IN THE AREA OF CONCERN. THE MANAGER OF WATER DISTRIBUTION WILL BEGIN AN EVALUATION OF THE PROBLEM AND ACTIVATE ANY OR ALL OF THE FOLLOWING OPTIONS HE BELIEVES PROPER.

(A) DIRECT THE EMERGENCY LINE CREWS TO OPEN

HYDRANTS IN THE PROBLEM AREA AND FLUSH THE LINES.

- (B) IF AN IDENTIFIED POTENTIALLY HAZARDOUS CROSS CONNECTION IS IN THE VICINITY OF THE PROBLEM AREA (AS SHOWN ON THE LOCATION MAP WITH THE HYDRANTS AND VALVES), HE MAY CONTACT THE RESPONSIBLE PERSONS (FROM THE CROSS CONNECTION CONTROL FILES) AND WITH SYSTEM SERVICES PERSONNEL MAKE AN IMMEDIATE INSPECTION. IF A CROSS CONNECTION EXISTS, IT WILL BE CORRECTED OR THE WATER SERVICE IF THE CUSTOMER, WHOM IS DISCONNECTED. RESPONSIBLE FOR THE INCIDENT, CAN BE IDENTIFIED, THEN SAID CUSTOMER WILL BEAR THE COST OF CORRECTING THE AFFECTED SYSTEMS.
- (C) DIRECT THE EMERGENCY LINE CREWS TO CLOSE VALVES TO ISOLATE THE PROBLEM AREA FROM THE TOTAL DISTRIBUTION SYSTEM.
- (D) NOTIFY CUSTOMERS IN THE AFFECTED AREAS.
- (E) SHOULD ANY TESTING OR DISCOVERY DURING THIS EMERGENCY PROCEDURE REVEAL A HEALTH HAZARD CONTAMINATION, ADDITIONAL CHECKS TO ESTABLISH THE PROBLEM AREA LIMITS WILL BE MADE, THE PROBLEM AREA FLUSHED AND TREATED UNTIL PROVEN SAFE. THIS SITUATION WOULD ALSO INVOLVE USING LOCAL RADIO AND TELEVISION MEDIA AND WATER DEPARTMENT PERSONNEL TO INFORM THE PUBLIC AND MAKE PERSONAL CONTACT WITH EACH CUSTOMER IN THE PROBLEM AREA.

IT IS THE POLICY OF THE COWETA COUNTY WATER DEPARTMENT TO PROVIDE FOR PERSONNEL TO BE ON DUTY OR ON CALL TO EXECUTE THE ABOVE EMERGENCY PLAN AT ALL TIMES. THIS PROCEDURE ALSO REQUIRES OPERATING PERSONNEL TO INFORM THE MANAGEMENT OF EMERGENCY PROBLEMS.

#### TERMINOLOGY FOR BACKFLOW-PREVENTION PROGRAM

**AUTHORITY** - THE INDIVIDUAL, OFFICIAL, BOARD, DEPARTMENT OR AGENCY ESTABLISHED AND AUTHORIZED BY COUNTY, CITY AND/OR OTHER POLITICAL SUBDIVISION CREATED BY LAW TO ADMINISTER AND ENFORCE THE PROVISIONS OF THE PLUMBING CODE, THE FEDERAL AND STATE SAFE DRINKING WATER ACTS, AND THE RULES, REGULATIONS, AND POLICIES OF COWETA COUNTY, IN THE STATE OF GEORGIA.

**BACKFLOW** - A REVERSE FLOW IN A WATER SYSTEM FROM THE NORMAL OR INTENDED DIRECTION.

**BACKFLOW PREVENTER (BFP)** - A DEVICE DESIGNED TO PREVENT REVERSE FLOW IN A WATER SYSTEM. THE TERM SHOULD NORMALLY BE USED WHERE BACKPRESSURE-TYPE BACKFLOW IS IMPLIED.

**BACKFLOW PREVENTER, DOUBLE CHECK VALVE (DCV)** - A BACKPRESSURE-TYPE BACKFLOW-PREVENTION DEVICE DESIGNED FOR CONTINUOUS OR INTERMITTENT PRESSURE, INCLUDING BACKPRESSURE, WHERE POLLUTANTS ARE INVOLVED.

**BACKFLOW PREVENTER, DOUBLE DETECTOR CHECK** (DDC) - A BACKPRESSURE-TYPE BACKFLOW-PREVENTION DEVICE DESIGNED TO SERVE ALSO AS A DETECTOR CHECK ON FIRE PROTECTION SYSTEMS WHERE POLLUTANTS ARE INVOLVED. IT INCLUDES A LINE-SIZE APPROVED DOUBLE CHECK VALVE BACKFLOW PREVENTER WITH A METERED BYPASS, INTO WHICH HAS ALSO BEEN INCORPORATED AN APPROVED DOUBLE CHECK VALVE BACKFLOW PREVENTER.

**BACKFLOW PREVENTER, DUAL CHECK (DUC)** - A BACKPRESSURE-TYPE BACKFLOW-PREVENTION DEVICE DESIGNED ESPECIALLY FOR CONTAINING WATER SYSTEMS TO RESIDENCES, MOBILE HOMES, ETC., AS THE "SECOND LINE OF DEFENSE," WHERE POLLUTANTS ONLY ARE INVOLVED.

BACKFLOWPREVENTERWITHINTERMEDIATEATMOSPHERICVENT(IAV)-ABACKPRESSUREANDBACKSIPHONAGE-TYPEBACKFLOW-PREVENTIONDEVICEDESIGNEDTOOPERATEUNDERCONTINUOUSPRESSURE,INCLUDINGBACKPRESSURE,WHERELOW-DEGREECONTAMINANTSAREINVOLVED.

BACKFLOW PREVENTER, REDUCED PRESSURE ZONE (RPZ) - A BACKPRESSURE AND BACKSIPHONAGE-TYPE BACKFLOW- PREVENTION DEVICE DESIGNED TO OPERATE UNDER CONTINUOUS PRESSURE, INCLUDING BACKPRESSURE, WHERE CONTAMINANTS ARE INVOLVED.

BACKFLOW PREVENTER, REDUCED PRESSURE DETECTOR CHECK (RPDC) - A BACKPRESSURE AND BACKSIPHONAGE-TYPE BACKFLOW-PREVENTION DEVICE DESIGNED TO SERVE ALSO AS A DETECTOR CHECK ON FIRE PROTECTION SYSTEMS WHERE CONTAMINANTS ARE INVOLVED. IT INCLUDES A LINE-SIZE REDUCED PRESSURE ZONE BACKFLOW PREVENTER WITH A METERED BYPASS, INTO WHICH HAS ALSO BEEN INCORPORATED AN APPROVED REDUCED PRESSURE ZONE BACKFLOW PREVENTER.

**BACKFLOW-PREVENTION** - A PROGRAM, AN ORDINANCE, A CODE, A POLICY; DESIGNED TO DISCOVER, TO ELIMINATE, TO PREVENT; ALL UNAUTHORIZED AND UNCONTROLLED BACKFLOW AND CROSS-CONNECTIONS.

**BACKFLOW-PREVENTION BY CROSS-CONNECTION CONTROL** - THE INSTALLATION OF A BACKFLOW-PREVENTION DEVICE AT EACH CROSS-CONNECTION ON A PREMISES TO PROTECT BOTH THE PREMISES AND THE PUBLIC WATER SUPPLY MAIN ("THE FIRST LINE OF DEFENSE").

**BACKFLOW-PREVENTION BY CONTAINMENT** - THE INSTALLATION OF A BACKFLOW PREVENTER AT THE SERVICE-CONNECTION TO THE PREMISES TO PROTECT THE PUBLIC WATER SUPPLY MAIN ONLY ("THE SECOND LINE OF DEFENSE").

**BACKPRESSURE** - AN INCREASE IN PRESSURE, IN A CONSUMER'S WATER SYSTEM, OR A BRANCH OF THE SYSTEM, ABOVE THAT AT THE SERVICE-CONNECTION. IT IS GENERALLY CAUSED BY PUMPS, THERMAL EXPANSION, OR REASONS OTHER THAN A REDUCTION OR LOSS OF THE INCOMING PRESSURE. BACKPRESSURE IS GENERALLY MORE EVIDENT IN A CLOSED WATER SYSTEM.

**BACKSIPHONAGE** - A REVERSE FLOW IN A WATER SYSTEM CAUSED BY A NEGATIVE PRESSURE IN THE INCOMING PIPE, WHEN THE POINT OF USE IS AT ATMOSPHERIC PRESSURE. BACKSIPHONAGE IS GENERALLY MORE EVIDENT IN AN OPEN WATER SYSTEM.

**BACKSIPHONAGE PREVENTER** - A DEVICE DESIGNED TO PREVENT REVERSE FLOW IN A WATER SYSTEM. THE TERM SHOULD BE USED ONLY WHERE A NEGATIVE SUPPLY PRESSURE IS IMPLIED.

**CERTIFIED TESTER** - A PERSON QUALIFIED TO TEST AND REPAIR BACKFLOW-PREVENTION AND CROSS-CONNECTION CONTROL DEVICES; AND WHO HAS PROVED HIS COMPETENCY TO THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY.

**CLOSED WATER SYSTEM** - ONE WITH A CHECKING DEVICE INSTALLED IN THE SERVICE PIPE. A CHECK VALVE, BACKFLOW PREVENTER, OR PRESSURE REDUCING VALVE WOULD CREATE A CLOSED SYSTEM.

**CONSUMER'S WATER SYSTEM** - ALL POTABLE WATER PIPING, VALVES, FITTINGS AND APPURTENANCES ON THE PREMISES SIDE OF THE SERVICE-CONNECTION.

**CONTAMINANT** - ANY SUBSTANCE THAT, IF INTRODUCED INTO THE POTABLE WATER SYSTEM, COULD CREATE A HEALTH HAZARD.

**CROSS-CONNECTION** - A PHYSICAL CONNECTION OR ARRANGEMENT BETWEEN TWO OTHERWISE SEPARATE PIPING SYSTEMS; ONE OF WHICH CONTAINS POTABLE WATER, THE OTHER A NONPOTABLE FLUID, OR WATER OF UNKNOWN QUALITY WHERE THERE COULD BE BACKFLOW INTO THE POTABLE SYSTEM UNLESS IT IS PROTECTED BY AN APPROPRIATE BACKFLOW-PREVENTION DEVICE.

**CROSS-CONNECTION, NONPRESSURE TYPE** - A LOW-INLET INSTALLATION WHERE A POTABLE WATER PIPE IS CONNECTED OR EXTENDED BELOW THE OVERFLOW RIM OF A RECEPTACLE, OR AN ENVIRONMENT, THAT CONTAINS A NONPOTABLE FLUID, AND IS AT ATMOSPHERIC PRESSURE.

**CROSS-CONNECTION, PRESSURE TYPE** - AN INSTALLATION WHERE A POTABLE WATER PIPE IS CONNECTED TO A CLOSED VESSEL, OR A PIPING SYSTEM, THAT CONTAINS NONPOTABLE FLUID, AND IS ABOVE ATMOSPHERIC PRESSURE.

HAZARD, DEGREE OF - A DANGER OR POTENTIAL DANGER TO HEALTH, DUE TO CONTAMINANTS ENTERING THE POTABLE WATER SYSTEM VIA UNCONTROLLED CROSS-CONNECTIONS, WHICH CAN RANGE IN SEVERITY FROM MILDLY TOXIC TO LETHAL.

**INSPECTOR** - AN INDIVIDUAL QUALIFIED AND AUTHORIZED TO MAKE INSPECTIONS, INTERPRET CODES, REGULATIONS, AND PROCEDURES.

**OPEN WATER SYSTEM** - ONE WITH NO CHECKING DEVICE INSTALLED IN THE SERVICE PIPE. WATER FROM THE CONSUMER'S SYSTEM IS FREE TO BACKFLOW INTO THE MAIN, FOR WHATEVER REASON. **POLLUTANT** - ANY SUBSTANCE THAT, IF INTRODUCED INTO THE POTABLE WATER SYSTEM, COULD BE OBJECTIONABLE BUT COULD NOT CREATE A HEALTH HAZARD.

**POTABLE WATER** - ANY WATER THAT, ACCORDING TO RECOGNIZED STANDARDS, IS SAFE FOR HUMAN CONSUMPTION.

**PUBLIC WATER SUPPLY/SYSTEM** - A WATER SYSTEM (INCLUDING BUT NOT LIMITED TO SUPPLY, TREATMENT, TRANSMISSION AND DISTRIBUTION FACILITIES AND APPURTENANCES) OPERATED AS A PUBLIC UTILITY THAT SUPPLIES POTABLE WATER TO THE SERVICE-CONNECTION OF THE CONSUMER'S WATER SYSTEM. (HEREIN DEFINED, THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY).

**REPRESENTATIVE** - A PERSON AUTHORIZED TO REPRESENT THE SUPERINTENDENT OF THE COWETA COUNTY WATER AND SEWERAGE AUTHORITY.

**SERVICE-CONNECTION** - THE POINT OF DELIVERY OF WATER TO A PREMISES: THE NORMAL LOCATION OF THE METER. IT IS THE END OF THE WATER PURVEYOR'S JURISDICTION AND THE BEGINNING OF THE PLUMBING OFFICIAL'S AND THE CONSUMER'S.

**VACUUM BREAKER (VB)** - A BACKSIPHONAGE-PREVENTION DEVICE THAT INTRODUCES AIR INTO THE POTABLE WATER SYSTEM WHEN THE SYSTEM PRESSURE APPROACHES ZERO. IT IS DESIGNED FOR USE WHERE THE RECEPTACLE OR ENVIRONMENT BEING SERVED IS SUBJECT TO ATMOSPHERIC PRESSURE ONLY.

VACUUM BREAKER, ATMOSPHERIC TYPE (AVB) - A BACKSIPHONAGE-PREVENTION DEVICE DESIGNED FOR USE UNDER FLOW CONDITIONS ONLY, NOT TO EXCEED 12 CONSECUTIVE HOURS, AND WHERE IT WILL BE SUBJECT TO NO STATIC PRESSURE, AND NO BACKPRESSURE.

VACUUM BREAKER, PRESSURE TYPE (PVB) - A BACKSIPHONAGE-PREVENTION DEVICE DESIGNED TO OPERATE UNDER CONTINUOUS PRESSURE; STATIC OR FLOWING, BUT NO BACKPRESSURE.

**VACUUM BREAKER, HOSE TYPE (HVB)** - A BACKSIPHONAGE-PREVENTION DEVICE DESIGNED FOR HOSE CONNECTIONS ONLY, BUT NOT FOR CONTINUOUS PRESSURE, STATIC OR FLOWING.

**VACUUM RELIEF VALVE** - A DEVICE DESIGNED TO LIMIT THE DEGREE OF VACUUM IN A VESSEL OR PIPE, BUT NOT FOR CROSS-CONNECTION CONTROL.

## APPENDIX C FIGURES



#### COWETA COUNTY WATER & SEWERAGE AUTHORITY BACKFLOW - PREVENTION

#### "a community environmental/health protection program" ASSEMBLY TEST DATA and MAINTENANCE REPORT

ACCOUNT NAMI	FILE NO.:								
MAILING ADDRE	88:						METER READING:		
SERVICE ADDR	METER NO.:								
LOCATION OF A	INSTALLATION DATE:								
TYPE OF ASSEMBLY: MANUFAC			ACTURER: MODEL NO.:			SIZE;	SERIAL NO.:		
DATE:	TIME:	TEST:	AL SEMI-	ANNUAL ANNU	AL 🔲 OT	THER - LIST			
SERVICE TYPE:						NE PRESSURE AT TIME OF	PRESSURE DROP ACROSS FIRST		
DOMEST		BINATION	IRRIGATION	OTHER		ST: PSI	CHECK VALVE PSID		
	CHECK VALVE NO. 1		CHECK VALVE NO. 2		DIFFERENTIAL PRESSURE RELIEF VALVE		PRESSURE VACUUM BREAKER		
INITIAL TEST	1. Leaked		1. Leaked		1. Opened at		1. Air inlet PSID		
	2. Closed at		2. Closed at	PSID	2. Did not op	en 🗖	2. Did not open		
	Cleaned Replaced Disc Spring		Cleaned Replaced Disc Spring		Cleaned Replaced Disc Upper		Check Valve Leaked Discourse Closed at State PSID		
REPAIRS	Guide Pin Retainer Hinge Pin Seal Diaphragm "O" Rings Complete Repair Kit Other, Describe		Guide Pin Retainer Hinge Pin Seal Diaphragm "O" Rings Complete Repai Other, Desoribe	P-1200 0	Lower Spring Diaphragm, Upper Lower Diaphragm, Upper Lower Spacer, Low "O" Rings Complete F Other, Dese	. Small	Cleaned Replaced CVAssembly Dis c Air Inlet Dis c CV Spring Retainer Guide "O" Rings Complete Repair Kit Other, Desoribe		
FINAL TEST	1. Leaked 2. Closed at		1. Leaked 2. Closed at		1. Opened at 2. Did not op	— <u> </u>	1. Air inlet opened at PSID 2. Did not open		
BFP TEST KIT M	ANUFACTURER: KIT MODE	ELNO.: KI	T SERIAL NO.:	KIT CALIBRATION: DA	TE CALIBRATED	D: COMPANY:			
REMARKS:		1		II		L			
	IFY THAT THIS DATA IS ACCU		E) AND REFLECTS T		ASSED	FAILED TESTING.	ASSEM BLY.		
COWETA COUNTY WATER & SEWERAGE AUTHORITY BACKFLOW - PREVENTION 545 CORINTH ROAD NEWNAN GA, 30263 Office: FINAL (770)254-3710 Fax:(770)254-3714			STED BY: (SIGNATURE)			TESTED BY: (NAME AND FIRM)			
		REPAIRE	REPAIRED BY: (SIGNATURE) REPAIRED				RED BY: (NAME AND FIRM)		
		ce: FINAL TE	ST BY: (SIGNATURE	E)		FINAL TEST BY: (NAME AND FIRM)			
			(191)						
		TRAININ	3 CERTIFICATE NO.			CERTIFICATE EXPIRATION DATE:			