

City of Covington

Public Works Meeting

City Hall

LLC at 4:00 P.M.

March 11, 2019

1. **Well # 7 Modifications. (See attached)**
2. **Inspect and clean aerators. (See attached)**
3. **Cross- Connection Control Plane Ordinance. (See attached)**
4. **Street Naming Request.**
5. **Abandoned/Vacant Property Ordinance.**
6. **Building Permits/Codes Discussion. (See attached)**

Other Business:

1. Code Division monthly report: (See attached)

Adjourn:

City of Covington, TN

2019 Well and Pump Modifications

Well #7

Prepared by:
National Water Services, LLC



February 15, 2019

Mr. James Mason
Mr. Calvin Johnson
Covington Public Utilities
300 South College Street
Covington, Tennessee 38019

Subject: Well 7 Pump Repairs and Modifications to Product Lubrication

Mr. Mason,

Pursuant to our discussions and at your request, National Water Services, LLC is pleased to submit a proposal for the repair, modifications and installation of your pumping unit in well number 7. During the removal and later during the inspection, the following information was obtained.

Prior to removal the 8 inch column pipe had washed out at the threads and was totally separated in two places. Upon removal we were able to retrieve 80 feet of the column pipe leaving the rest of the setting in the well. We returned with our fishing pipe and tools and were able to get the remainder of the column pipe out leaving the oil tube and pump in the well. After building another fishing tool we returned and removed the pump with all of the oil tube and shaft. Once all the pump components were out of the well, a video of the well was recorded to insure no damage occurred at the lap pipe and also to look at the condition of the screen.

The results of the video shows the well to be 553.84 feet deep. The top of the screen is at 478 feet and the top of the lap pipe is at 420 feet. Although we had previously removed the standard 20 feet of suction pipe with the pump, the video shows a 10 foot piece of suction pipe laying on top of the lap pipe. This old suction pipe is from 409 feet to 419 feet. The top of the pipe has a coupling attached to it. This tells us that this pipe was once the bottom piece of a 20 foot suction pipe. Although this pipe is not causing water flow obstruction we can retrieve it if it is decided to do so. The view of the screen shows it to be a Rosco Moss louvered screen. Unlike a wire-wrap screen, a louvered screen prevents a visual inspection of what is behind the screen such as silts, clays, iron build-up or native sand that has breached the sand pack. Although internally the screen looked to be in good shape, records dating back to 2003 indicate the specific capacity of the well was 48 gallons per minute per foot of drawdown. Last year's PM/ testing results show the specific capacity to be 38.95 gallons per minute per foot of drawdown. This is a decrease of 19.75 percent over that time frame. Calculating the difference in specific capacity of 9.05 gallons per minute per foot and your existing drawdown of 23.10 feet this is a loss of 209 gallons per minute entering the well.

The specific capacity of a well is the pumping rate divided by the drawdown. It is a valuable number that can be used to provide the maximum yield of a well. It is used to identify well, pump, or aquifer problems. The specific capacity obtained just after a well is properly developed is typically the highest value that will be produced and is the benchmark with which to compare all future values. Specific Capacity will decline as plugging of the wells screen or filter pack occurs, or as static water levels change.

Prior to replacing the pumping unit, our recommendation is to clean the well with our high velocity injection system as we have successfully completed on your wells #5 and #6.



Deep Well Revitalization Patented High Velocity Injection Process

Our Patented Process and Equipment is not a twin disc surge but a patented process that pushes chemistry in sequential treatments under high flow and pressure out into the aquifer, past the screen and past the gravel pack. This same system removes these chemicals with our high flow submersible pumping unit. We continue this process back and forth completely cleaning and clearing the actual aquifer as opposed to conventional methods of cleaning that only effect the screen and gravel pack. Our patented high velocity injection process system has an integral 3,500-gallon tank and can inject chemicals at infinitely variable rates up to 5,000 gallons per minute. The chemical quantities, induction time and mixtures can be determined while the cleaning is in process, as testing can be conducted real time by testing composition and chemistry in our process tank. This is the only system available in the industry with this ability. The patented system is also set up with a series of valves and meters that allow the monitoring of flow and divert the direction of discharge. This allows us not only to pressure surge the well but to also pump the well to waste, to take drawdown measurements and flow rates for pump testing the well during this process to monitor the progress of the rehabilitation.

Unit Characteristics

- * Mobile and wheel mounted
- * Equipped with 3,500 gallon tank with ability to mix chemicals and neutralize discharge prior to release
- * Mounted diesel driven motor
- * Capable of surging up to 5,000 gallons per minute
- * Has ability to measure flow rates at discharge
- * Produces real time results during revitalization process
- * Controls flow rates and pressure during injection process
- * Capable of sealing well head to control pressure and flow

Procedures

- * Remove existing pump unit from well
- * Perform video inspection of well and screen
- * Install test pumping equipment and injection head
- * Conduct pre cleaning pump test
- * Clear water surge
- * Pump off until water clears
- * Inject chemicals tailored for well based upon information available
- * Chemical reaction sustainment period
- * Surge well until chemical is spent
- * Pump well
- * Record pumping levels and perform post rehab test
- * Perform final video inspection of well
- * Reinstall repaired pumping unit and test



Chemicals that are allotted and included within this proposal

- * Muriatic Acid - Inhibited
- * Soda Ash
- * Sodium Hypochlorite
- * Sodium Tripolyphosphate

The cost to complete the cleaning with our injection system has not increased since your last cleaning and will be-----\$50,882.00

Findings Upon Complete Inspection Of Pumping Unit:

Once all the pieces to your pumping system were fished from the well we conducted a full inspection. I have attached photo's of our findings.

The actual pump bowl is worn and can not be re-built. The bowl bushings are gone and the shaft has cut into the casting of the pump. The impellers are eaten up and are paper thin. As this is a brass bowl the cost to repair would exceed the cost of a new bowl coated inside and out with Scotchkote 134 like your pumps in wells 5 and 6.

The 8 inch column pipe and couplings are washed out with threads missing and thin. This was the cause of the system falling in the well. The column pipe and couplings will require replacement.

The stainless steel shaft and oil tube had to be used to retrieve the pump and therefore had to be cut. Since you are planning to convert to water pre-lube the oil tube will not be used.

The motor is salvageable but has damage to the bearings and windings. The motor will be re-wound and new bearings installed.

To repair and use this discharge head and convert it to a water lubricated head we will remove the tension nut assembly that will not be needed, and install a packing box assemble. We will sandblast and paint the discharge head.

The oil that was used to lubricate this system will need to be removed from the well. This oil is trapped at the static water level and a bailer will be used to remove it.

A pre lubrication system is required for the water product lube conversion. The prelube would come from a distribution line in the park and be equipped with a solenoid and timer. It is my understanding, Covington will supply a line to the well site and NWS will supply fittings and solenoid to put the line into operation. Covington will need to supply an electrician to wire the solenoid.



PRODUCT LUBRICATED MODIFICATION, REPAIR AND REPLACEMENT

Materials Required

- (1) J11HC-2 stage National Pump, water lub, 900 gpm @ 132 tdh, with Scotchkote 134 inside and out
- (2) Threaded column assembly 8 x 1.25 x 5 feet, .277 wall, 10 tpi, 8 x 2 Bz bearing retainers
- (10) Threaded column assembly 8 x 1.25 x 10 feet, .277 wall, 10 tpi, 8 x 2 Bz bearing retainers
- (11) 1-1/4" x 10' TBE 416 SS Shaft
- (2) 1-1/4" x 5' TBE 416 SS Shaft
- (20') 8 inch steel suction pipe
- (11) BRG/RET 8" x 2" BZ
- (11) Rubber Insert FSB 1-1/4 x 2 Buna
- (1) 1.25 x TBD Head Shaft Assembly
- (1) 1.25 Stuffing Box Assembly
- (1) Solenoid
- (1) Flow No Flow Valve and necessary plumbing
- (3) Epoxy Paint
- (1) Scotchkote Paint
- (1) LS Gasket Packs
- (1) LS SS Strapping
- (120') Stainless air line with gauge
- (1) Furnish and install a plumbing for product pre lubrication supply line supplied by Covington

Machine Shop Cost

- Re-wind 50 hp Motor and Install New Bearings
- Scotchkote Pump Inside and Out
- Clean Column Threads and Epoxy Coat New Column Pipe
- Clean and Epoxy Coat New Suction Pipe
- Install New Water Lub Stuffing Box and Bearing in Existing Discharge Head
- Sandblast and Paint Existing Discharge Head
- Dial Indicate new Shaft

Total Materials and Machine Shop -----\$37,890.00

Installation and Commissioning including post installation testing and training

- Mobilize Crane, Crew, Service Truck and Pumping Unit to Site
- Install Suction Pipe, Pumping Unit and Pump Setting
- Install Discharge Head and Motor and Wire Complete
- Install Product Lubrication System From Line Supplied by Covington
- Perform Post Pump installation test
- Provide training



Provide O&M and Warranty

Total Installation and Commissioning -----\$3,200.00

Additional Item: Remove Oil From Well

Total Additional Item -----\$1,600.00

Product Lubricated Modification, Repair and Replacement----\$42,690.00

Total Project Cost With Well Revitalization High Velocity Injection Process and New Product Lubricated Pumping System-----\$93,572.00

As always we appreciate the opportunity to serve you and your system. If I can be of further assistance, feel free to contact me any time.

Sincerely,

NATIONAL WATER SERVICES, LLC

Barry Weaver
(931) 762-7548
(256) 656-6881



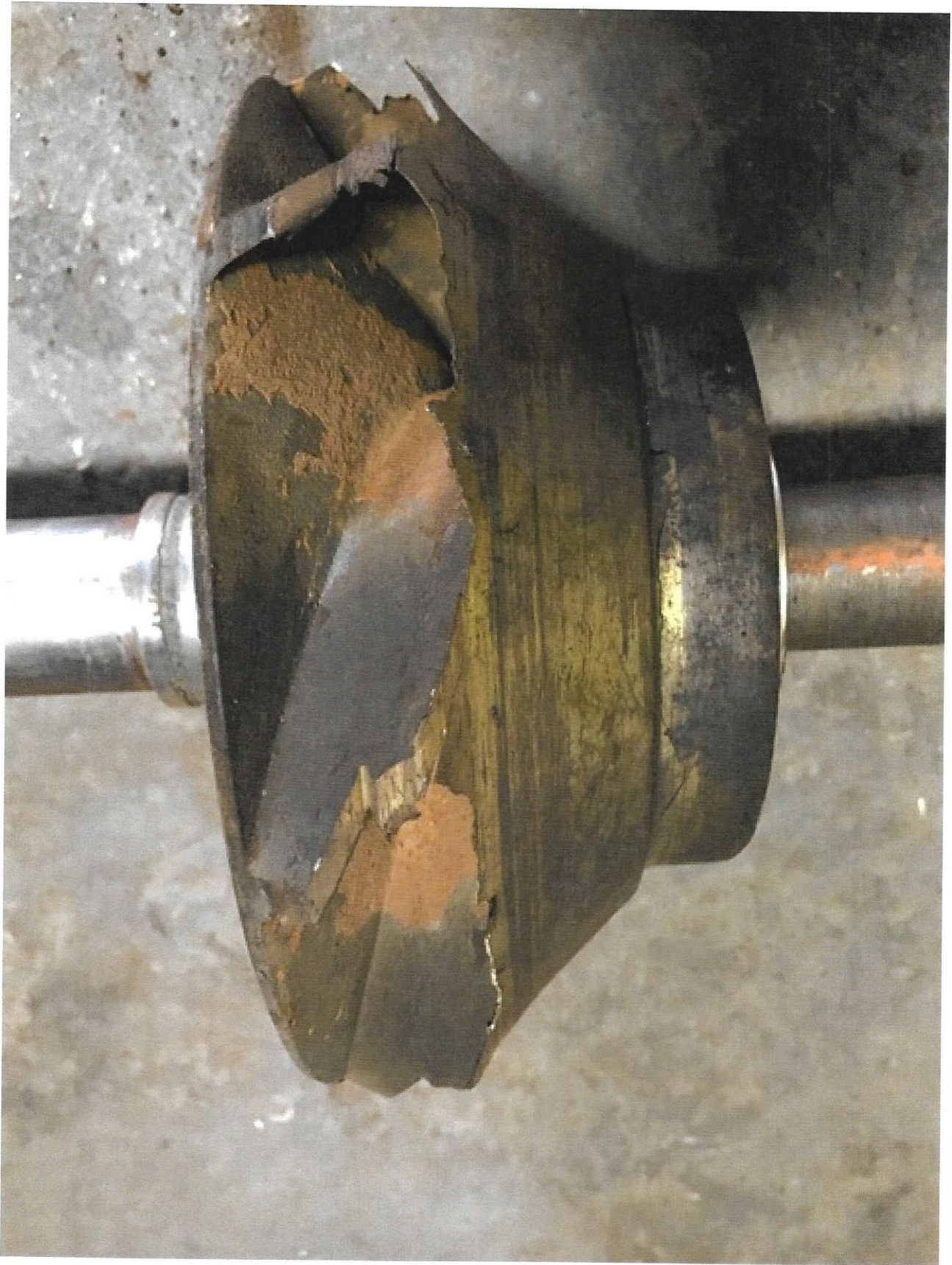


From: **Bweaver** bweaver@national-water.com 
Subject:
Date: February 15, 2019 at 9:38 AM
To: bweaver@national-water.com

B










From: **Bweaver** bweaver@national-water.com 
Subject:
Date: February 15, 2019 at 9:24 AM
To: bweaver@national-water.com

B





From: **Bweaver** bweaver@national-water.com 
Subject:
Date: February 15, 2019 at 9:37 AM
To: bweaver@national-water.com

B









RONALD FRANKS CONSTRUCTION CO., L.L.C.

80 Industrial Road, Savannah, TN 38372 PH: 731.925.7912 FAX: 731.925.8499 WEB: www.rfctn.com

March 4th, 2019

City of Covington

Calvin Johnson

Mr. Johnson

Ronald Franks Construction proposes to furnish all labor and equipment to inspect the aerator at the WTP for the lump sum price of \$ 3,850.00

Clarifications

- 1: One day with a boom truck and 4 men to inspect and see what is wrong with the aerator
- 2: Clean out any debris while the aerator is open
- 3: Pressure wash the nozzles and inspect them
- 4: NO MATERIAL is in the quote

If you have any questions concerning this proposal please contact the writer at 731-412-9140

Respectfully
Chad Austin
RFC
Cell: 731-412-9140
Email caustin@rfctn.com

City of Covington Cross-Connection Control Plan

I. Introduction

A. Goal

The goal of The City of Covington is to supply safe water to each and every customer under all foreseeable circumstances. Each instance where water is used improperly so as to create the possibility of backflow due to cross connections threatens the health and safety of customers and chances of realizing this goal. The possibility of backflow due to improper use of water within the customer's premises is especially significant because such cross connections may easily result in the contamination of our water supply mains. Such situations may result in the public water system becoming a transmitter of diseased organisms, toxic materials, or other hazardous substances that may adversely affect large numbers of people. The only protection against such occurrences is the elimination of such cross connections or the isolation of such hazards from the water supply lines by properly installed approved backflow prevention assemblies. City of Covington must continue maintenance of a continuing program of cross connection control to systematically and effectively prevent the contamination or pollution of all potable water systems.

B. Plan of Action

City of Covington is determined to take every reasonable precaution to ensure that cross connections are not allowed to contaminate the water being distributed to its customers. This Cross Connection Control Plan outlines a course of action designed to control cross connection within the area served by the utility. This plan is intended to be a practical guide for safeguarding the quality of water distributed from becoming contaminated or polluted through backflow. By following the plan of action, City of Covington will ensure that all aspects of the Policy on Cross Connection Control are being followed by customers.

II. Authority for Cross Connection Control

A copy of the Policy, adopted _____ by the Mayor and Board alderman's is attached to this plan as Appendix 1. This Policy prohibits cross connections within water systems, authorizes the water system to make inspections of the customer's premises, requires that cross-connection hazards be corrected and provides for enforcement. This Policy expresses clear determination on the part of the Board that the water system is to be operated free of cross-connections that endanger the health and safety of those depending upon the public water supply. This Policy is considered to be a sound basis for the control of cross-connection hazards by the operating staff and management of the City of Covington. The provisions contained within this Policy are in keeping with the requirements set forth in Section 68-221-711 (6) of Tennessee Code Annotated and Section 1200-5-1-.17(6) of Tennessee Department of Environment and Conservation Rules governing Public Water Systems.

III. Program To Be Pursued

The City of Covington will establish an active on-going cross-connection control program. This program is to be a continuing effort to locate and correct all existing cross-connection hazards and to discourage the creation of new problems. Safeguarding the quality of water being distributed to our customers is a high priority concern of the management of the utility department.

A. Staffing

The City of Covington has designated an individual to see that the program to control cross-connections is pursued in an aggressive and effective manner. It is proposed that ample time will be devoted to the program to ensure its effectiveness. Additional personnel will be added as is deemed necessary.

James Mason- Cross-Connection Control Coordinator

B. Cross-Connection Control Surveys/Inspections

A representative of the City will survey the distribution system using the "Cross Connection Survey" form for all customers, both residential and nonresidential, for possible cross-connections. If it is determined from the survey form that possible cross-connections may exist, the premise will be inspected. The need for backflow protection will be determined based on the results from the inspection. Notification of the type of backflow prevention assembly required and a date of compliance will be sent to the customer.

Non-Residential:

All new installation nonresidential and commercial establishments (or those converting from residential to non-residential or commercial) are required to have a City approved reduced pressure backflow preventer installed. If there are existing establishments that have not been inspected, a list agreed upon by the State (based on risk and public safety) and time line for inspection by the water provider will be generated. All non-residential establishments not having a City approved reduced pressure backflow assembly will be inspected every 5 years. If establishment changes ownership (name listed on water bill), if plumbing permits are issued or irrigation systems installed, then an inspection will need to be performed within 30 days. The need for backflow protection will be determined based on the results from the inspection. Notification of the type of backflow prevention assembly required and a date of compliance will be sent to the customer. (Attached is a list of criteria for requiring assemblies-Appendix A)

Residential:

For new residential customers, a written questionnaire (the "Cross Connection Survey" form) will be given upon request for water service. If the survey reveals that a potential cross-connection may be present, an inspection is to be performed. The need for backflow protection will be determined based on the results from the inspection. Notification of the type of backflow prevention assembly required and a date of compliance will be sent to the customer. Each new residential customer will agree to not create cross-connections and a brochure will be given to each new customer describing cross-connections and the responsibility of the customer in not creating one. Each new customer shall sign the "Cross Connection Prevention Agreement".

If the "Cross Connection Survey" form reveals that the new customer may have any of the following, an inspection will be required:

1. Lawn irrigation systems
2. Residential fire protection systems (closed loop systems will require a double check valve minimum)
3. Pools, Saunas, Hot Tubs, Fountains
4. Auxiliary Intakes and Supplies-wells, cistern, ponds, streams, etc.
5. Home water treatment systems
6. Hobbies that require extensive amounts of toxic chemicals (taxidermy, metal plating, biodiesel, ethanol production, etc.)
7. Any other situations or conditions listed in the manual or conditions deemed a threat by the water system.

"Cross Connection Survey" forms will be sent to existing residential customers to determine if potential cross-connections exist. The distribution system will be entirely surveyed every five years. The distribution system will continue to be surveyed in this manner. Survey forms that reveal potential cross-connections based on the criteria above will be inspected and a determination if backflow prevention assemblies are needed.

The system will be surveyed for residential lawn irrigation systems through the survey forms received and by secondary meters. All residential lawn irrigation systems will require a reduced pressure backflow assembly. Residential customers with pools, saunas, hot tubs not filled by a hard pipe directly or indirectly connected will be required to use an atmospheric vacuum breaker at the hose bibb. However, if the pool or vessel is connected directly or indirectly by a hard line, a City approved reduced pressure backflow assembly shall be required at minimum.

Residential customers required to have backflow prevention assemblies will be informed of possible thermal expansion problems within the establishment and correction of the condition.

C. Public Education and Awareness Efforts

The City of Covington recognizes that it is important to inform its customers of the health hazards associated with cross-connections and to acquaint them with the program being pursued to safeguard the quality of water being distributed. The City will seek to use every practical means available to acquaint the customers with the health hazards associated with cross-connections in an effort to get cooperation. Use of customer "Cross Connection Survey" forms, annual newspaper notices and annual notices to customers with known cross connections will be incorporated into the notification plan.

Information will be provided to all customers about cross-connection control and backflow prevention by individual pamphlets or through a notice in the local newspaper at least once per year. A brochure will be given to all new customers requesting water service describing cross-connections and prevention of backflow.

The following measures may also be used to inform customers about the need to control cross-connections:

1. Posters at the counter where the water bills are paid displayed one month out of the year
2.
 - a. Personal visits to commercial, industrial, institutional, and agricultural customers to explain the need for controlling cross-connections.
 - b. Whenever possible, any such potential customer will be informed of needed cross-connection measures in the design or construction stage.

D. Customer's Responsibility

The customer will be responsible for Yearly testing of their Device.

Cross-connections, created and maintained by the customer for his convenience endanger the health and safety of all who depend upon the public water supply. Therefore, the customer who creates a cross-connection problem shall bear the expense of providing necessary backflow protection and for keeping the protective measures in good working order. This includes repair, testing, installation, and sending their test results to the district within 30 days of date of testing.

E. Enforcement

Where cross-connections are found to exist, City of Covington will require the problem to be eliminated or isolated by a properly installed, City approved backflow prevention assembly to prevent the possibility of backflow into the distribution system. Such protective measures will include a backflow prevention assembly on the customer's water service line ahead of any water outlets. Every effort will be made to secure the voluntary cooperation of the customer in correcting cross-connection hazards. If voluntary action cannot be obtained with time set forth by written notice (30 days maximum for high and low hazard, 14 days maximum for high risk high hazards) to the customer, water service will be discontinued until conditions are in line with the City's Policy for the protection of the health and safety of the water distribution system.

After surveys or inspections have been completed, the establishments will be contacted by written correspondence outlining any correction (adding or repairing backflow prevention devices) needed and the time schedule allowed for correction of conditions. If the conditions have not been corrected by the time allotment (30 days maximum for high and low hazard, 14 days maximum for high risk high hazards), the water service will be discontinued to the establishment.

The City of Covington may give additional warnings of discontinuance before the water service is discontinued. The time period for correction will be determined by the City based on the seriousness of the hazard and risk of contamination, ranging from immediate correction or time period of up to 30 days. The maximum allowable time for correction will be no more than 30 days. Those sites deemed high risk high hazard are corrected within a maximum limit of 14 business days, preferably immediate correction. If the conditions do not satisfy the City's Policy or Plan within 30 days, water service will be discontinued. In the case of backflow prevention devices on fire systems, it is recommended that the fire marshal be contacted before water service is discontinued, to prevent harm to anyone in case a fire occurs in a public building. The fire marshal can condemn the building, thus not allowing anyone to enter.

Water service will not be allowed to the establishment until all corrections have been made and all conditions of the Policy and Plan have been satisfied.

IV. Procedures for Inspections:

The City of Covington hopes that its efforts to acquaint its customers with the hazards of cross-connections will be successful to the point that the customer will try to maintain their internal water delivery system free of cross-connections. It is recognized that many customers may not recognize that they have a situation that would permit backflow into the water supply lines. Therefore, a thorough investigation will be made of all premises considered likely to have cross-connections. Such inspections will involve the customer's entire water using equipment, and other system components in an effort to locate all actual and potential cross-connections. The findings will be reported to the owner or occupant in writing along with a request for needed corrective action necessary to properly protect the public water system.

A. Field Visit Procedures:

During the inspection, a "Field Sheet" will be completed showing details of significant findings. The hazards which cross-connections pose will be explained fully to the persons assisting the inspection. The customer will be informed that the information gathered during the inspection will be reviewed by the City's Cross Connection Control Coordinator and that a written report containing any recommendations and requirements will be mailed to them as soon as possible.

B. Reports to Customers:

The findings of the investigation will be summarized and a written report will be sent to the person assisting in the investigation, or the ranking management official of the establishment. Cross-connections found will be described briefly along with recommended method of correction. An effort will be made to keep the description of the findings and recommendations clear, concise and as brief as possible. The correspondence will indicate a willingness to assist with questions. The customer will be given a time limit (maximum of 30 days) for making the needed corrections depending upon the seriousness of the cross-connections involved and upon the complexity and difficulty of correcting the problems.

C. Follow-up Visits and Re-inspections

Follow-up visits will be made as needed to assist the customer and to assure that satisfactory progress has been made. Such visits will continue until all corrective actions have been completed to the satisfaction of the water system.

D. Installation of Backflow Prevention Devices:

Where the customer is asked to install a backflow prevention assembly, the customer will be supplied with a list of acceptable and approved assemblies. In addition, minimum acceptable installation criteria will be supplied. It will be pointed out that a unit cannot be accepted until the water system has verified that the installation fully meets the installation criteria and has been tested to verify that the assembly has a status of Passed.

Such backflow prevention assemblies must have a make, model, and orientation currently listed as acceptable by the both the water system and Tennessee Department of Environment and Conservation.

E. Technical Assistance:

The customer will be urged to notify the water system when they are ready to begin installing a City approved backflow preventer assembly. The City's cross-connection representative will visit the site to detail how the unit(s) must be installed to achieve the desired protection and to minimize maintenance and testing problems.

V. Premises Requiring Reduced Pressure Principle Assemblies

A. High Risk High Hazards

When establishments which pose significant risk of contamination or may create conditions which pose an extreme hazard of immediate concern (High Risk High Hazards), the cross-connection control inspector shall require immediate or a short amount of time (14 days maximum), depending on conditions, for corrective action to be taken. In such cases, if corrections have not been made within the time limits set forth, water service will be discontinued.

High Risk High Hazards require a City approved reduced pressure principle (or detector) assembly. The following list is establishments deemed high risk high hazard and require a reduced pressure principle assembly:

High Risk High Hazards:

1. Mortuaries, morgues, autopsy facilities
2. Hospitals, medical buildings, animal hospitals and control centers, doctor and dental offices
3. Sewage treatment facilities, water treatment, sewage and water treatment pump stations
4. Premises with auxiliary water supplies or industrial piping systems
5. Chemical plants (manufacturing, processing, compounding, or treatment)
6. Laboratories (industrial, commercial, medical research, school)
7. Packing and rendering houses
8. Manufacturing plants
9. Food and beverage processing plants
10. Automated car wash facilities
11. Extermination companies
12. Airports, railroads, bus terminals, piers, boat docks
13. Bulk distributors and users of pesticides, herbicides, liquid fertilizer, etc.
14. Metal plating, pickling, and anodizing operations
15. Greenhouses and nurseries
16. Commercial laundries and dry cleaners
17. Film Laboratories
18. Petroleum processes and storage plants
19. Restricted establishments
20. Schools and Educational Facilities
21. Animal feedlots, chicken houses, and CAFOs
22. Taxidermy facilities
23. Establishments which handle, process, or have extremely toxic or large amounts of toxic chemicals or use water of unknown or unsafe quality extensively.

B. High Hazard

In cases where there is less risk of contamination, or less likelihood of cross-connections contaminating the system, a time period of 30 days maximum will be allowed for corrections. High Hazard is a cross-connection or potential cross-connection involving any substance that could, if introduced in the public water supply, cause death, illness, and spread disease. High hazards require a City approved Reduced pressure backflow assembly. (See "Appendix A")

VI. Premises Requiring Double Check Valve Assemblies

Low Hazard

Low hazard is a cross-connection or potential cross-connection involving any substance that would not be a health hazard but would constitute a nuisance or be aesthetically

objectionable if introduced into the public water supply. Low Hazards are protected by double check valve assemblies at minimum.

VII. Inspection and Testing of Backflow Prevention Assemblies

A. Approval of New Installations

The Water System will not consider the installation of assemblies to be complete until:

1. The installation has been inspected, and approved by the City based on installation criteria; and
2. Assembly is tested initially and has a status of Passed.

B. Routine Inspection and Testing of Assemblies

To assure that all assemblies are functioning properly, assemblies must be tested within a 12 month (No more than 365 days from last test) period by backflow prevention assembly testers with a Certificate of Competency. If assembly is not tested within the 12 month period, enforcement action will be started. In conjunction with testing the assembly the approved tester will investigate to determine:

1. That cross-connections, actual or potential, have not been added ahead of the protective assemblies,
2. The assembly meets all installation criteria; and
3. The assembly has not been bypassed or altered in some other way to compromise the backflow protection.

All reduced pressure and double check valve backflow prevention assemblies, including detector assemblies, utilized for the protection of the water system will be tested by a person possessing a valid Certificate of Competency from the State and approved by the water system in keeping with the following criteria:

1. Immediately following installation;
2. At least every 12 months;
3. Any time assemblies have been partially disassembled for cleaning and/or repair and;
4. Where there is indication that the unit may not be functioning properly (i.e. excessive or continuous discharges from relief valve, chatter, or vibration of internal parts).

C. Accepted Test Procedure

Tests of assemblies will be made using a 3 or 5 valve test kit that has valid annual certification in accordance to the latest approved testing procedure from the Division of Water Resources.

D. Official Tests

Only tests performed by persons possessing a valid Certificate of Competency will be considered official tests by the City. All test reports submitted must be of the type approved by the Division of Water Supply and provided by the City. All parts of testing procedure must be recorded accurately on the test report with a determination of status (Passed or Failed). Certificates of Competency are not transferrable. City employees are prohibited from performing annual testing for customers. All customers shall submit their annual testing results to the district within 30 days of date of testing.

E. Prior Arrangements for Testing

Prior arrangements will be made for a mutually agreeable time for testing the assemblies prior to performing the test. In all cases, the time which water services are interrupted will be held to a minimum in order to minimize the inconvenience to the customer.

F. Repairs

Should a protective assembly be found defective or have a status of Failed, the City will require the assembly to be repaired promptly with manufacturer's specified parts, in accordance to manufacturer's suggested procedure, and placed in proper operating condition within a (specified) time limit (maximum 30 days, 14 days for high risk high hazards). Following repairs, the assembly is to be tested again to verify that it is meeting performance standards and have a status of Passed. The owner will be held responsible for maintaining protective measures in a good state of repairs.

The owner of an assembly needing repairs or maintenance will be permitted to do the work, if such owner is properly qualified or the owner may elect to secure the services of someone else experienced in the repair of the assemblies. City employees are prohibited from installing, repairing or replacing assemblies for customers.

VIII. Parallel Units

The water system may require the installation of parallel assemblies if the customer cannot readily accommodate interruptions of water service for periodic testing and repairs of the assemblies.

IX. Records

Good records are invaluable in the City's efforts to safeguard the quality of water being distributed against degradation from backflow through cross-connections. Adequate records will be maintained as a part of the City's permanent files to:

- A. Document the overall effort of the water system to properly discharge its responsibility to see that each customer receives a safe water under all foreseeable circumstances;
- B. Give a complete picture as to the current status and history of the individual premises regarding the potential for backflow, corrections made, etc.;
- C. To support enforcement action, whenever necessary, to obtain backflow protection; and

D. Document that assemblies have been properly installed, maintained, and tested routinely.

Records to be maintained by the City will include, but not necessarily be limited to the following;

- A. Master List of all Establishments with assemblies used for premise isolation, including location, assembly used, make, model, size, serial number etc.;
- B. Correspondence between water system and its customers
- C. Copy of Approved Policy
- D. Copy of Approved Plan
- E. Test reports for each assembly
- F. Copies of Certificates of Competency for each tester
- G. Copies of test kit certifications
- H. Site Inspection Reports
- I. Residential written surveys
- J. Backflow incident reports
- K. Records on initial surveys, recommendations, follow-up, corrective action, routine re-inspections, etc.
- L. A file system designed to call to the attention of the cross-connection control personnel when testing and re-inspections of premises are needed.
- M. Public education pamphlets and information.

X. Backflow Contamination Procedures:

If contamination is caused by backflow, the City of Covington will take the following actions to protect the health of the customer:

- A. Isolate the lines containing any contaminant from the distribution system;
- B. Inform customers with contaminated lines not to consume or use the water;
- C. Report contamination to the local environmental field office;
- D. Determine and separate the cross-connection allowing the backflow and contamination;
- E. Remove contamination from lines;
- F. Test and ensure that lines meet Division of Water Supply regulations for safe water;
- G. Return service to affected customers once water is safe;
- H. Document the details of the incident including cause, isolation, and correction, and send report to the local environmental field office;
- I. Continue to survey and inspect system for similar situations that may allow backflow.

XI. Modifications to Plan

This plan may be modified from time to time to meet the needs of the utility and to meet the states requirements. The Plan and Policy will be reviewed by the City every five (5) years to determine if the existing plan meets requirements set forth by the Division of Water Supply and that it promotes an ongoing program. The manager shall be authorized to modify, as needed, this plan with the approval of the water system's governing body. The manager shall also advise the local environmental field office of any changes to this plan for their review and comments.

XII. Approval Signatures

Date: _____

Date: _____

Date: _____

Department of Code Compliance Report

Presented at rescheduled CPW Committee meeting on 3-11-2019

Items to address from the F & A Committee meeting are

1 – Street Naming Request

As of the time of submittal of this report we have not received the documents requested from Mr. Edwards regarding his application for street naming for Quincey Barlow Way and Isaac Hayes Way.

We would like to provide the following list of Personal Contributions that we feel as a minimum should be taken into consideration when considering Naming City-owned property and City streets:

Significant monetary contributions to Covington or the Municipal entities.

Significant contributions of tangible property, art work, historical items, real estate.

Established scholarships for the betterment of the next generations.

Outstanding, noble or heroic achievements for our City and/or Country.

Personal involvement and leadership efforts to improve the Quality of Life for residents.

The individual must have lived a more than exceptional and moral life without blemish.

2 – Abandoned/Vacant Property Ordinance

During a meeting with Attorney Witherington and Ronnie Neill with MTAS, we discovered Tipton County does not currently meet the population requirements per TCA to adopt this type ordinance; therefore, we are with drawing our request for consideration.

3 – Building Permits/Codes Discussion

During the same meeting Attorney Witherington, Ronnie Neill and myself determined we need to complete further investigation into how to proceed with these type regulations. Currently we were unable to locate that any TN court has addressed the legality of regulating dwelling sizes. We were only able to find cases in other States. Attorney Witherington is still reviewing to see if she can find that any of the lower courts have taken any action on this matter. Our planer Will Radford is also still reviewing what other jurisdictions have considered on this matter.