

CITY OF ROCKVILLE ROCKVILLE, MARYLAND

# Addendum #1 Request for Proposal (RFP) No. 10-25 CROSS-CONNECTION CONTROL PROGRAM PLANNING SUPPORT AND BACKFLOW ASSEMBLY SURVEY December 10, 2024

#### ATTENTION ALL BIDDERS:

The following addendum is being issued to amend and clarify certain information contained in the abovenamed RFP. All information contained herein is binding on all firms who respond to this RFP. Specific parts of the RFP have been amended. Firms are required to acknowledge receipt of the addendum by signing in the appropriate space at the end of the addendum. Failure to do so may subject your bid to disqualification. No provided answer to a question may in and of itself change any requirement of the RFP. The following revisions /deletions / additions are listed below; new language has been double underlined and marked in red bold (ex: <u>new language</u>) and language deleted has been marked with a double strikeout (ex. <del>language deleted</del>).

#### **CLARIFICATION**

**Page 9, SECTION I.E** made reference to appendices A – D. Appendices A – C are included in this addendum. Appendix D and items five and six will be provided after contract award.

- E. <u>Existing Information</u>. Below is a list of existing information that will be provided by the City.
  - 1. Appendix A, map of the City's water service area. See attached
  - 2. Appendix B, Cross-Connection Control Program Plan See attached
  - 3. Appendix C, Emergency Response Plan to a Cross Connection Incident See attached
  - 4. Appendix D, Example of current Backflow Survey123 Form showing all information required for collection during the survey event.
  - 5. After contract award, the City will share water meter locations via a map.
  - 6. After contract award, the City will provide its existing backflow inventory.



Appendix A City of Rockville Water Service Area



Appendix B



# City of Rockville Cross-Connection Control Program Plan May 2024

#### Background

By law, water purveyors such as the City of Rockville, are required to have and implement a plan for controlling cross-connections. A cross-connection is an actual or potential connection between the public water supply and a source of contamination or pollution that could occur from equipment attached to the water line. To control potential connections, backflow assemblies are installed on "high hazard" fixtures to ensure potentially contaminated water from a building does not back-up into the main potable water distribution system.

#### **Required Program Elements**

Program elements required for a comprehensive Cross-Connection Control Program (CCCP) are listed below along with the City of Rockville's progress toward achieving required elements.

- Cross-Connection Prevention Ordinance. The ordinance concerning cross-connection is included in Chapter 24 of the City Code, "Water, Sewers and Wastewater Disposal". The crossconnection component of the code was approved by the Maryland Department of the Environment (MDE) on February 8, 2019, and the entire Chapter 24 was approved by Mayor and Council on July 8, 2019. The ordinance establishes authority for the program, technical provisions relating to eliminating backflow and cross-connections, and penalty provisions for violations. It also addresses required installation in new facilities and associated maintenance, repair, inspection, and annual testing of backflow prevention devices.
- 2. **Public Outreach.** CCCP public outreach is directed to commercial sectors within the City of Rockville and notifies building management that backflow testing must be performed annually and submitted to the City.

The City is developing a CCCP website, news articles, social media reminders, partnerships with the Chamber of Commerce and the Rockville Economic Development, Inc., announcements in water bills, and explore other avenues to educate commercial property owners.

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- 3. Backflow Prevention Database and Verification of Location. The City has an inventory of approximately 800 assemblies and will complete a comprehensive survey of existing commercial buildings to expand the inventory. To expand the current inventory, the City is hiring a consultant to survey installation of suitable backflow assemblies in all commercial buildings. The consultant collects the location, type of assembly, and fixture connection and identifies locations where backflow assembly installations are needed. The City is in talks with a third-party firm who provides administrative support to send annual test reminder letters, collect test report fees and manage the database of all assembly locations and test reports.
- 4. **Enforcement Action.** Enforcement focuses on repair, replacement, new installation, and/or completion of an annual test.
  - A part-time staff member dedicated to implementing the CCCP performs inspections of over 1000 commercial buildings to verify the database and annual test report activity.
  - When an assembly is not in compliance, the inspector issued a field Notice of Violation (NOV). Along with issuance of a Notice of Violation, a compliance plan is issued whereby completion timelines for each violation are addressed. Chapter 24 of the Rockville City code authorizes additional enforcement options including penalties if needed to gain compliance.
- **5. Standard Operating Procedure (SOP).** The City has an existing SOP that provides instructions for the following tasks:
  - Performing inspections of newly installed backflow prevention devices.
  - Methodology and location of data entry of device serial number, type, and date of next annual test.
  - Enforcement methodology and criteria for issuance of an NOV and compliance report.
  - Where to submit annual testing information for efficient and accurate recordkeeping.
  - How to handle a backflow emergency.
- 6. Permit Development. A plumbing permit is required for all new installations. The permit form is already in use by Community Planning and Development Services, Inspection Services Division. All new installations are required to be tested and plumbers performing the installation submit test reports and fees to the third-party administrative platform.
- 7. **Recordkeeping.** A third-party administration platform is used to collect and manage data. Among other things they collect the test reports and fees. The platform includes a dashboard and map which tracks test reports by address. Administrators of the platform send letters to businesses when testing is required. When testing is complete, the certified tester uploads the reports and fee to the platform. All test reports are collected and kept in the system to be viewed by City staff.
- 8. Required Reporting. Any facility that has one or more backflow prevention assembly is required to have each assembly tagged showing the installation inspection date (backflow prevention tag) and submit annual backflow prevention assembly test reports to the City via the third-party administrative platform.
  - **Backflow Prevention Inspection Tag.** The backflow prevention tag is used to identify the date of installation and will stay attached to the backflow prevention device and

replaced each year when testing occurs. The backflow prevention inspection tag identifies the model type, serial number, and the replacement date. The tag will be distributed to the plumber at the time the plumbing permit is acquired.

 Backflow Prevention Assembly Test Report. The test report is an annual submission and is submitted by the certified cross-connection tester to the third-party administrator who uploads the test report, collect the fee, and post compliance on the dashboard.

#### **Cross-Connection Control Program Implementation**

#### **Program Funding**

The adopted FY 2025 budget appropriated funds to implement the CCCP and established a fee schedule for annual backflow test reports. The program and fee structure are incorporated into the 10-year water and sewer rate study. Program funding supports the following:

- 1. Consultant support to survey backflow assemblies installed on fixtures in commercial buildings and identifying where new assemblies are required to avoid cross-connections.
- 2. Adding a part-time regular employee to verify installation of assemblies, annual testing, and perform enforcement.
- 3. Contracting with a third-party administration firm to provide administrative support to send annual test reminder letters, collect test report fees and manage the data base of all assembly locations and test reports.

#### **Program Timeline**

The following is an estimated timeline to implement these tasks.

- May 2024 to January 2025:
  - Recruit the new part-time inspector position.
  - Develop and solicit, and procure a RFP for a consultant to survey assembly installations in commercial buildings.
- **October to December 2024**: Establish a contract with a third-party administration firm to provide the platform for database management, letter reminders, and fee collection.
- January 2025 to January 2028:
  - Perform outreach to certified testers and all commercial building managers that program requires the following:
    - A fee for all test reports.
    - A consultant will survey all commercial buildings for the next three years to ensure backflow assemblies are installed on correct fixtures and that testing on assemblies is current.
    - The backflow inspector inspects buildings to ensure all testing reports are consistent with what is reported to the administrative database. This position performs enforcement for those businesses failing to submit test reports.

- Post 2028:
  - Contractor inventory will be complete.
  - Part time staff will maintain and continue to check inventory during daily inspections.
  - Part time staff will perform enforcement to ensure installation is occurring and test reporting is current.

#### Conclusion

This CCCP workplan serves as an intermediary plan in the development of the program that will ensure the safety of the City's potable water system for Rockville's residents and businesses.

Appendix C



# Standard Operating Procedure for Cross-Connection Control Program Version 2, May 2024

## Application

Applies to those individuals managing the Backflow Prevention Program as well as those involved with permitting, plans review, inspection, enforcement, and cross connection incidents.

## Operation

The operational program is divided into three sections:

- Inspection of new installations by Inspection Services Division (ISD) of the Department of Community Planning and Development,
- II. Inspections for existing installations and
- III. Administration by the Department of Public Works (DPW).

#### I. Inspection-New Installations

Within ISD, tasks ensuring proper backflow prevention assembly installation are performed by three groups within the City: Permit Techs, Plans Review, and Inspection Services. These are the first groups contractors will be in contact with to learn of the City's requirements of backflow prevention installation and maintenance.

**Permit Techs.** Permit Techs are the first point of contact and source of information for backflow prevention installation. Permit Techs will guide applicants through the initial stages of the required installations:

• Contractors will be required to apply for a plumbing permit and a backflow prevention application.

- Pay the fees calculated from the plumbing permit at the cashier upstairs from the permit desk.
- Distribute to applicant:
  - o backflow prevention test report
  - o test tag
  - o Backflow Prevention Guidance Document
- The permit techs will inform applicants that test reports can be submitted to the City of Rockville Backflow Prevention Program at (<u>www.backflowprevention@rockvillemd.gov</u>) upon new backflow installation as well as subsequent annual tests.
- Permit techs should refer any questions relating to the Backflow Prevention Program to be directed to the Program Coordinator at 240-314-8878.

**Plans Review.** During plans review, reviewers will ensure that testable backflow prevention assemblies are included on appropriate fixtures in all plans. Drawings should exhibit the following installations:

- On all domestic service lines, fire sprinkler lines, and irrigation lines for containment.
- All appurtenances including boilers, chillers, pumps, or any appurtenances that use chemicals or can backflow back into the facilities water distribution system for isolation.
- Plan reviewers shall ensure that all assembly installations are accessible for inspection.
- All assemblies will be installed above-ground within the building. Domestic service lines shall have assemblies installed at the first point of entry within a building. Subgrade backflow installations shall be prohibited.
- Facilities such as dental offices, golf courses, medical offices, dry cleaners, and labs all uses that are considered to pose a "high hazard" risk shall have installations that reflect isolation and containment protections.
- Equipment such as coffee machines, ice makers, and soda machines will have dual check valves installed.

**ISD Inspectors.** Ensure that backflow preventer assemblies are installed according to the approved plan. Inspectors shall ensure the following during a plumbing inspection:

- Inspectors shall ensure that all backflow assemblies have City of Rockville test tags and show a test date reflective of the new installation.
- Inspectors shall ensure that all backflow preventers must be readily accessible for inspection, testing, and maintenance.
- Backflow preventers shall be tested immediately after they are installed, relocated, or repaired and not placed in service unless they are functioning as required.

# II. Inspection-Existing Installations

DPW is responsible for maintaining the inventory of all backflow prevention assemblies and ensuring that they are inspected and tested annually. Inspections, field visits, and enforcement are performed by a Senior Cross Connection Program Inspector and directed by the Environmental Program Manager.

Inspections. Inspections will be conducted with the following precedence.

**Priority Inspections.** Facilities that are likely to be considered "severe" or "high" hazards will be inspected first. Follow-up inspections will be made as necessary until all cross-connections or potential backflow locations are removed with approved backflow prevention assemblies.

*Second Priority Inspections.* Facilities that are likely to be considered "moderate" hazard with potential cross-connections or potential backflow locations will be surveyed after completion of the Priority Inspections.

*Other Inspections.* Surveys will continue beyond those listed in the top two priorities with the intent to inspect and collect the inventory at all commercial facilities within the City of Rockville that are connected to the City's water distribution system.

*Pre-Arranged Survey.* In some instances, appointments will be made with property owners to ensure the best time for the survey and proper personnel are available to provide appropriate documentation and access. Appointments will be made by phoning, emailing, or dropping in at the site to collect inventory data and contact information.

**Unannounced Visits.** Unannounced visits are the normal procedure for all inspections. Inspector wants to see how assemblies are maintained regularly without anticipating a visit from a City inspector.

*Follow-up Visits and Re-inspection.* These inspections will occur as needed to assist the property owner in complying with all the local, state, and federal backflow requirements. These visits will continue until all corrective action has been completed to the satisfaction of the City of Rockville.

**Field Visit Procedures.** Each inspection visit surveys backflow prevention assemblies, assesses placement on appropriate fixtures and locations within a building, and whether all assemblies are up to date on their annual test. During the inspection, educational outreach materials are to be distributed to inform the recipient of City Code, state, and federal requirements, why assembly placement is important for the health of the City's water distribution system, and how to avoid future violations from City inspectors.

*Inspection Reports.* Inspection reports shall be issued after each inspection detailing the status of all necessary containment and isolation assemblies. Status refers to existing or new assembly location, latest annual test record dates, and any issues found to be noncompliant.

**Enforcement Evaluation.** Enforcement will occur when the inspector finds that a backflow preventer needs to be installed on an appurtenance or an assembly has not had annual testing.

*Notice of Violation.* The inspector will issue notification for installation in the form of a Notice of Violation (NOV). The NOV is a written notice to the owner that the City of Rockville has observed a violation of the Cross Connection Program standards or requirements and expects the noncompliance issue(s) to be rectified. NOVs are issued in person, by certified mail, or by email.

- The property owner must apply for a plumbing permit and Backflow Application through ISD as a part of the compliance plan.
- The property owner must hire a licensed plumber with a Maryland Backflow Certification to perform the installation and testing.
- If an NOV is issued to request annual testing, thirty days will be allotted for compliance to perform the testing (see *Backflow Prevention Guidance Document*).
- In the event violations continue to occur, the property owner shall be notified by the City of Rockville and administrative penalties will be issued or water service termination. The penalty structure is outlined in City of Rockville Code, Chapter 24.

#### III. Administration-Recordkeeping

Administrative tasks are performed by a third-party administrator and City support personnel. Records are managed by the third-party administrator and accessed via a login and viewed in a dashboard. Records and address standings are in a separate spread sheet to track compliance with enforcement actions. The following records must be maintained:

- Inventory of backflow prevention devices including locational address and description of location within address confines.
- Backflow inspection records and findings of noncompliance.
- Noncompliance are followed by a Notice of Violation and compliance plan.

- Letters reminding building operators that test reports are due.
- Testing and maintenance reports that shall be maintained and kept for five years.

## Training

Training of staff occurs through reviewing the City of Rockville *Backflow Prevention Guidance Document*, the American Water Works Association (AWWA), *Backflow Prevention and Cross-Connection Control M14*, *Recommended Practices*, and a Backflow Prevention training course associated with the role in the program (surveying and administrative certifications).

## **Cross Connection Incidents**

The occurrence of a backflow incident should be sent to the Environmental Program Manager who will work with the Director of Public Works to assess the problem and direct the following actions:

- Locate the source of the contamination.
- Isolate that source to protect the water distribution system from further contamination.
- Collect water samples from the potable water system and perform a 24-hour bacteriological analysis. Water samples should be collected from the closest acceptable point to the cross-connection.
- Send bacteriological samples to lab.
- If the bacteriological samples collected are positive, chlorinate the potable water system maintaining a chlorine residual of at least 50 mg/l for 24 hours (AWWA standard procedures implemented).
- If chemical contamination, assess the risk after sampling and lab analyses.
- Contact WSSC if water contamination will flow into their system.
- Eliminate the cross-connection.
- Determine the extent of the spread of contamination through the distribution system and provide, timely, appropriate notification to the public (including do not use, drink or boil water) and to regulatory agencies.
- Take corrective action to clean the contamination from the distribution system.
- Flush the potable water system after 24-hours and perform standard bacteriological analysis.
- Restore service to customers.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME IN THE REQUEST FOR PROPOSAL (RFP).

Additionally, please be sure to submit all required forms with your proposal per this addendum and the solicitation instructions.

ACKNOWLEDGE RECEIPT OF ADDENDUM NO. 1 BY SIGNING BELOW AND RETURNING A COPY OF THE ADDENDUM WITH YOUR PROPOSAL OR ACKNOWLEDGING IN YOUR PROPOSAL.

ISSUED BY: TJ Ellison, Principal Buyer, 12/10/2024

NAME OF BIDDER:

BID DUE DATE: 2:00 P.M. (EST), WEDNESDAY, DECEMBER 11, 2024