

Prepared for:

## **City of Rochester Hills**

Department of Public Services  
1000 Rochester Hills Drive  
Rochester, MI 48309

# CROSS CONNECTION CONTROL PLAN

For



## **City of Rochester Hills**

Rochester Hills Approved: "[Insert Client approval date]"  
MDEQ Approved: "[Insert State approval date]"

Prepared by:

**HydroCorp**  
5700 Crooks Road, Suite 100  
Troy, MI 48098  
P: 248.250.5000 or F: 248.786.1789

## TABLE OF CONTENTS

<b>1. INTRODUCTION</b> .....	<b>1</b>
<b>2. AUTHORITY</b> .....	<b>1</b>
2.1. INSPECTOR/DESIGNATED AGENT .....	1
<b>3. PROGRAM APPROACH</b> .....	<b>2</b>
<b>4. INSPECTIONS</b> .....	<b>2</b>
4.1. REQUEST FOR INTERNAL CROSS CONNECTION CONTROL INFORMATION .....	3
4.2. SUBMISSION OF INTERNAL CROSS CONNECTION CONTROL INFORMATION .....	3
4.3. CONTAINMENT.....	4
<b>5. TESTING BACKFLOW PREVENTION ASSEMBLIES</b> .....	<b>4</b>
<b>6. RECORD KEEPING</b> .....	<b>5</b>
<b>7. ENFORCEMENT</b> .....	<b>6</b>
<b>8. PUBLIC EDUCATION</b> .....	<b>6</b>
<b>9. ANNUAL REPORT</b> .....	<b>8</b>
<b>APPENDIX A - LOCAL ORDINANCE</b> .....	<b>9</b>
<b>APPENDIX B - FIELD FORMS</b> .....	<b>10</b>
<b>APPENDIX C - NOTICE TEMPLATES</b> .....	<b>11</b>
<b>CROSS CONNECTION CONTROL PROGRAM INSPECTION NOTICE</b> .....	12
<b>CROSS CONNECTION CONTROL PROGRAM INSPECTION COMPLIANCE NOTICE</b> .....	13
<b>CROSS CONNECTION CONTROL PROGRAM CONTAINMENT COMPLIANCE NOTIFICATION</b> .....	14
<b>REQUEST FOR INTERNAL CROSS CONNECTION CONTROL INFORMATION NOTICE</b> .....	15
<b>INSPECTION NON-COMPLIANCE NOTICE 1</b> .....	16
<b>INSPECTION NON-COMPLIANCE NOTICE 2</b> .....	17
<b>CROSS CONNECTION CONTROL PROGRAM INSPECTION SHUT-OFF NOTICE</b> .....	18
<b>ANNUAL TEST NOTICE</b> .....	19
<b>TEST NOTICE #2</b> .....	20
<b>TESTING SHUT-OFF NOTICE</b> .....	21
<b>APPENDIX D - TEST FORM</b> .....	<b>22</b>

## 1. INTRODUCTION

In accordance to the requirements set forth by the Michigan Department of Environmental Quality (MDEQ), the City of Rochester Hills has officially adopted the state of Michigan cross connection rules to protect the public water supply system. A cross connection is defined as a connection or arrangement of piping or appurtenances through which a backflow could occur. Backflow is defined as the undesirable reversal of flow of water of questionable quality, wastes or other contaminants into a public water supply. The purpose of this program is to avoid contamination of the public water supply by preventing and eliminating cross connections. It is the City of Rochester Hills intent to carry out a comprehensive and effective cross connection control program (CCCP) to ensure public health is protected and the requirements of the Michigan Safe Drinking Water Act are complied with.

## 2. AUTHORITY

The authority to carry out and enforce the local CCCP is provided from local ordinance (see Appendix A), the Michigan Safe Drinking Water Act (Act 399), the MDEQ, Water Bureau Cross Connection Rules Manual, and the Michigan Plumbing Code.

### 2.1. Inspector/Designated Agent

The City of Rochester Hills or Designated Agent (Authority/Agent) conducting inspections on behalf of the City of Rochester Hills must be designated/approved by the City of Rochester Hills. The Authority/Agent must meet both 1) an experience component and 2) a certification/training component. Acceptable components are as follows:

#### Experience

- Be employed by a Utility, Water Purveyor, Building Department, or body of jurisdiction and must meet the qualifications and training requirements as dictated by the Authority conducting inspections/surveys on behalf of the City of Rochester Hills
- Have held a similar position (CCC Inspector) with a previous municipality
- One year full time experience in conducting cross connection control inspections in commercial, institutional and industrial facilities

#### Certification/Training

- Meet American Society of Sanitary Engineer Standards (ASSE) 5020 and completed their Cross Connection Inspector Course (40 hours)
- Possess a certificate of completion from one of the following:
  - USC *Cross Connection Control Specialist Course* (40 hours)
  - TREEO *Cross Connection Control Program Manager Course* (40 hour)
  - Michigan Plumbing and Mechanical Contractors Association, *Backflow Preventer Training Program* (24 hour)
- Other approved cross connection courses for surveying, as approved by the Authority for conducting inspections/surveys on behalf of Rochester Hills. Submission requirements for approvals must include the following:
  - Course outline
  - Date of attendance
  - Outline of test questions
  - Categories and grading criteria
  - Certificate of satisfactory completion

### **3. PROGRAM APPROACH**

The objectives of this program will be met primarily by:

- Routinely inspecting water customers for cross connections or potential cross connections.
- Requiring water customers to test backflow prevention assemblies.
- Maintaining cross connection control records.
- Actively enforcing violations of the program.
- Providing public education.
- Reporting the status of the program to the MDEQ.

The City of Rochester Hills shall ensure that there are adequate personnel and resources to carry out the necessary field and administrative requirements for this program. The City of Rochester Hills adopts the MDEQ, Water Bureau Cross Connection Rules Manual as a guide to prevent and eliminate cross connections.

### **4. INSPECTIONS**

The water connections and plumbing systems of all water customers or accounts shall be initially inspected for the presence of cross connections. As a result of the initial inspection, a detailed record of each account shall be established (see Section VI). A representative of the water utility or their designated agent shall be responsible for inspections. Individuals responsible for conducting inspections shall have obtained sufficient training on cross connection rules, identification, and corrective actions.

Inspections shall consist of entering a facility from the point where water service enters the facility (usually the meter) and tracing the piping to each end point of use. Using the inspection forms in Appendix B, the inspector shall identify and note the location and nature of any direct and potential cross connections, location and details of backflow prevention devices, and other pertinent information. Inspectors having proper identification, shall be permitted to enter the building/premises at reasonable times for the purpose of cross connection inspections. If the inspector is refused proper access or if customer plumbing is untraceable, the City of Rochester Hills will assume a cross connection is present and take the necessary action to ensure the public water supply is protected.

The highest priority for inspections shall be placed on facilities that pose a high degree of hazard, that have a high probability that backflow will occur, or are known/suspected to have cross connections.

Once initial inspections are complete, then a re-inspection frequency shall be determined for each account based on the degree of hazard and potential for backflow. The MDEQ Cross Connection Rules Manual will be a guide in classifying the degree of hazard of each account. However, in general, situations in which backflow could cause illness or death shall be considered high hazard. Accounts that pose a high hazard or have a high potential for back flow to occur, must be re-inspected at least once per year. All other accounts must be re-inspected once every 1-10 years based on the degree of risk. Other factors such as new construction, water quality complaints, or anomalies in customer billing, may prompt an immediate re-inspection. After initial cross connection inspections are complete, a comprehensive list or inventory of all backflow prevention devices shall be on record including all pertinent data.

## Section 4 continued

Following an inspection, the City of Rochester Hills shall inform the customer of their compliance status with the cross connection rules. Template notices in Appendix C may be used to inform customers of upcoming inspections, required corrective actions, compliance status, etc.

### 4.1. Request for Internal Cross Connection Control Information

The Authority has the legal right to request specific cross connection control information to include but not limited to piping information, piping drawings or information related to a specific point of water use in relation to cross connections. The Authority shall issue a request notice for any one of the following:

- Facility is determined by the Inspector to be large and/or complex requiring considerable amount of additional time to inspect
- Facility does not allow for free and unlimited access to areas requiring inspection/survey
- Piping configurations are complex
- Piping is not readily accessible. (i.e. concealed piping)
- Multiple piping systems
- Inadequate piping identification
- Facility changes their plumbing configurations on a regular frequency
- Secondary/auxiliary water sources
- Manufacturing/use of industrial fluids in piping systems or facility operations
- Refusal of entry
- No current as-built/engineering drawings of the potable water system

If, the Authority/Agent is not able to complete an inspection the property owner must, at their own expense, have the plumbing inspected for cross-connections by a certified firm or individual that has met the requirements in Section 2.1.

### 4.2. Submission of Internal Cross Connection Control Information

Information that must be included is as follows:

- Methodology used to conduct the survey
- General facility overview
- List of violations/requirements - information must include the following:
  - Type of backflow prevention device to be installed
  - Size of backflow prevention device to be installed
  - Location description/remarks to include what the backflow prevention device will be supplying
- List of all existing backflow prevention devices (both testable and non-testable). Information that must be included is as follows:
  - Type of backflow prevention device installed
  - Size of backflow prevention device installed
  - Manufacturer of backflow prevention device to include:
    - Model
    - Serial number
  - Location description/remarks
- A proposed plan for the correction of violations/requirements must be submitted along with a proposed time table for completion.
- Drawings of the facility's potable water piping system may be required

## Section 4 continued

### 4.3. Containment

“Containment” \* is the installation of a backflow prevention device between the facility and public distribution systems. Containment assures there is no chance for water of questionable quality to leave a facility and to enter the public distribution system.

While a facility may be contained, the Authority may still require an inspection downstream of the containment device(s). It is the responsibility of the facility to provide potable water at all times to its employees and/or public. Failure on the facility's part to take corrective action would constitute a violation thus exposing the facility to possible legal ramifications.

A [Containment Notice](#) will be issued for any one of the following:

- Facility determined to be high hazard
- Refusal to comply with the normal steps for non-compliance
- Facility does not allow free and unlimited access to areas requiring inspection/survey
- Piping not differentiable or determined to be complex
- Piping is not readily accessible (i.e. concealed piping)
- Multiple piping systems
- Inadequate piping identification
- Facility changes their plumbing configurations on a regular frequency
- Secondary/auxiliary water sources
- Manufacturing/use of industrial fluids in piping systems or facility operations
- Refusal of entry
- No current as-built/engineering drawings of the potable water system

\* Containment device(s) does not negate the facility's responsibility to ensure the internal water system is protected utilizing appropriate backflow prevention methods.

## 5. TESTING BACKFLOW PREVENTION ASSEMBLIES

When inspections have been completed, a comprehensive list of backflow preventers installed on customer plumbing systems will be on record. The backflow preventers that are testable assemblies shall be placed on a routine testing schedule. All testable assemblies will be tested upon installation, upon repair and on an annual basis or as determined by the Authority. Backflow preventers installed on lawn irrigation systems with no chemical treatment may be tested once every 5 years.

Upon notice from the City of Rochester Hills, it shall be the responsibility of the water customer to arrange for the assembly to be tested and submit the completed test form.

Following the initial cross connection inspections and subsequent classification of accounts (e.g. assigning a degree of hazard), assembly testing notices shall be sent to customers each year. The notices shall be sent out in a timely manner in order to provide adequate time for customers to comply, and the timing will consider seasonal assemblies. Template notices in Appendix C may be used to inform customers of testing requirements. These notices will:

## Section 5 continued

- Clearly identify the assembly requiring testing (size, make, model, location, etc.)
- Stipulate the date by which the assembly must be tested.
- Indicate that tests must be completed by a certified tester. A list of approved testers may be provided and updated lists may be obtained from the DEQ.
- Enclose a standard test form (see Appendix D).

When assembly testing reports are received by the utility, they will be checked for the following:

- All the necessary information was provided
- Name and certification number of the tester is provided
- The test results appear valid
- The assembly tested matches the assembly requiring testing (Make, Model, etc.)
- The assembly is approved

Cross connection control program staff will follow up with owner or tester on questionable test forms. A customer may be asked to have an assembly retested if the original test results do not appear valid. Test forms must be received and kept on record for each required test.

## 6. RECORD KEEPING

A system of cross connection record keeping shall be maintained. Special software specifically for cross connections may be used for:

- Efficient record searches
- Easy reporting
- Simple updating
- Automatic letter generation
- Automatic deadline notification

All cross connections account information must be in the records including:

- Address and location
- Owner name and contact information
- List of testable assemblies
- Description of other cross connections within the facility
  - Air gaps
  - Non-testable assemblies
- Degree of hazard classification and basis
- Required re-inspection frequency
- Photos or sketches if available

All testable assemblies must be in the records including:

- Location of the assembly
- Name and contact information of assembly owner
- Make, model, and size of assembly
- Degree of hazard classification
- Required testing frequency and basis

Tracking changes in water use or tracking new customers is a critical part of the cross connection program. The City of Rochester Hills shall make every attempt to prevent/eliminate cross connections at installation to ensure future compliance. An effort shall be made to cooperate and communicate with the local plumbing code inspector to better accomplish this goal.

Standard letter, form, and report templates may be used to simplify the program requirements including:

- Inspection forms
- Assembly testing forms
- Inspection and/or assembly testing notification letters
- Non compliance letters
- Water service termination notice
- Hydrant use authorization forms

Copies of the written cross connection control program, ordinance, and DEQ approval letter should be kept on file. Copies of the MDEQ annual reports shall be kept for a minimum of 10 years.

## **7. ENFORCEMENT**

To protect public health, water customers found to be in violation of the cross connection rules will be brought into compliance in a timely manner or lose their privilege to be connected to the public water system. To properly enforce these rules the City of Rochester Hills ordinance provides authority to inspect facilities, terminate water service, and assess fines.

Following an inspection the customer will be sent either a compliance notice or a non-compliance notice. The timeframe to complete the necessary corrective actions is at the discretion of the utility and will be based primarily on the degree of risk posed by the violation but should also consider the complexity/cost of the necessary corrective actions. Cross connections that pose an imminent and extreme hazard shall be disconnected immediately and so maintained until proper protection is in place. Cross connections that do not pose an extreme hazard are generally expected to be eliminated within 30-60 days. The necessary corrective action and deadline shall be described in the non-compliance notice to the customer.

Failure to submit a test form for a backflow prevention assembly that has successfully passed testing requirements constitutes a cross connection and must be corrected and may result in the termination of water service and/or the assessment of a fine(s).

If a water shut off is necessary to protect the public water system, the local health department, fire department, local law enforcement, and the City of Rochester Hills may need to be notified.

## **8. PUBLIC EDUCATION**

The cross connection control program staff must have a good understanding of the program. The City of Rochester Hills shall ensure their cross connection control staff receives proper in-the-field training as well as classroom education focusing on terminology, backflow prevention devices/assemblies, regulations, and hydraulic concepts. In addition, cross connection control staff will be encouraged to receive continuing education to be made aware of new backflow prevention devices/assemblies, regulation changes (i.e. plumbing code updates), new water use devices that pose cross connection concerns, etc.

Furthermore, attempts to educate the public about cross connections shall be made by distributing pamphlets on common residential cross connections, visiting schools, providing onsite education of facility management and maintenance staff during routine inspections,

Section 8 continued

speaking at condominium association meetings, showing videos on local access channels, or posting newspaper announcements.

Cross connection staff shall also be available upon request to provide backflow prevention education to pertinent community officials and City of Rochester Hills employees.

## **9. ANNUAL REPORT**

Part 14 of the Michigan Safe Drinking Water Act requires that each community report the status of their program to the MDEQ annually. The report summarizes testing, inspection, and corrective action efforts. Cross connection records shall be on file to document each number on the report. The annual report form shall be filled out completely and submitted by the deadline. A narrative description shall be included explaining any unusual numbers or significant events such as:

- The addition or loss of a cross connection staff person
- Greatly expanded/contracted number of cross connection accounts
- Status of accounts not currently in compliance

**APPENDIX A - LOCAL ORDINANCE**

**APPENDIX B - FIELD FORMS**

<h2 style="margin: 0;">Hydro Designs, Inc.</h2> <hr/> <h3 style="margin: 0;">Cross-Connection Control Survey/Inspection Report</h3>																		
<b>Facility Name</b> _____ <b>Facility Name 2</b> _____ <b>Service Loc/Address</b> _____ <b>Contact Name</b> _____ <b>Area Name</b> _____ <b>Service Type</b> _____ <b>Comments</b> _____ _____ _____ _____ _____	<b>Survey Date</b> _____ <b>Survey By</b> _____  <b>Contact Phone</b> _____ <b>Acct Number</b> _____ <b>Facility Status</b> _____																	
<b>BFP/CC Info</b>																		
# 1	Location Floor _____ Equip Location _____	Location Room _____ Location ID _____ Meter # _____ Hazard Type _____ Haz. Level _____ Install Date _____	<input type="checkbox"/> Confinement <input type="checkbox"/> UD CB 1 <input type="checkbox"/> Freeze Protect Map Page _____ Protection Type _____ Status _____															
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">Type</td><td style="width: 20%;"></td><td style="width: 20%;"></td></tr> <tr><td>Mfr</td><td></td><td></td></tr> <tr><td>Size</td><td></td><td></td></tr> <tr><td>Model</td><td></td><td></td></tr> <tr><td>Serial Num</td><td></td><td></td></tr> </table>	Type			Mfr			Size			Model			Serial Num				
Type																		
Mfr																		
Size																		
Model																		
Serial Num																		
# 2	Location Floor _____ Equip Location _____	Location Room _____ Location ID _____ Meter # _____ Hazard Type _____ Haz. Level _____ Install Date _____	<input type="checkbox"/> Confinement <input type="checkbox"/> UD CB 1 <input type="checkbox"/> Freeze Protect Map Page _____ Protection Type _____ Status _____															
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">Type</td><td style="width: 20%;"></td><td style="width: 20%;"></td></tr> <tr><td>Mfr</td><td></td><td></td></tr> <tr><td>Size</td><td></td><td></td></tr> <tr><td>Model</td><td></td><td></td></tr> <tr><td>Serial Num</td><td></td><td></td></tr> </table>	Type			Mfr			Size			Model			Serial Num				
Type																		
Mfr																		
Size																		
Model																		
Serial Num																		
# 3	Location Floor _____ Equip Location _____	Location Room _____ Location ID _____ Meter # _____ Hazard Type _____ Haz. Level _____ Install Date _____	<input type="checkbox"/> Confinement <input type="checkbox"/> UD CB 1 <input type="checkbox"/> Freeze Protect Map Page _____ Protection Type _____ Status _____															
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">Type</td><td style="width: 20%;"></td><td style="width: 20%;"></td></tr> <tr><td>Mfr</td><td></td><td></td></tr> <tr><td>Size</td><td></td><td></td></tr> <tr><td>Model</td><td></td><td></td></tr> <tr><td>Serial Num</td><td></td><td></td></tr> </table>	Type			Mfr			Size			Model			Serial Num				
Type																		
Mfr																		
Size																		
Model																		
Serial Num																		

## APPENDIX C - NOTICE TEMPLATES

## Cross Connection Control Program Inspection Notice

«LetterSentDate :Month Day, Year»

«Mailing\_Address »

**RE: «LTR\_Facility\_Name » at «[Facility]Service Address Num Alpha» «[Facility]Service Address Street Name»**

Dear «Mail\_Greeting »

The Purpose of the City of Rochester Hills Cross Connection Control Program, as defined in the local Ordinance «LTR\_H2O\_Org\_Ordinance », is to help eliminate possible contamination of the public water distribution system. There are two required components of the program; 1) site inspection, and 2) testing of backflow prevention assemblies.

The City of Rochester Hills will be working jointly with inspectors from Hydro Designs Inc. to conduct these inspections. Thank you in advance for your cooperation in this matter.

As part of this program, an inspection of your facility's internal water system is to be completed. Inspectors will be reviewing your water system for connections that could possibly contaminate the water distribution system. The inspection is tentatively scheduled for «LTR\_Survey\_Initial\_Date », our inspector will do their best to be on site this day however we may be on site a day or two before or after the scheduled date. The inspection must be completed during normal business hours 8:00 AM to 5:00 PM. If you need a more specific time please call 1.800.690.6651 to arrange an appointment.

Any costs associated with the replacement, modification, installation and/or testing of backflow prevention assemblies is the responsibility of the property owner/manager and/or occupant.  
«LTR\_H2O\_Org\_Text\_04 »

You will be notified following the inspection if modification(s) and/or testing of backflow prevention assemblies are necessary. We look forward to working with you in protecting the drinking water supply. If you have any questions or concerns, please contact «LTR\_H2O\_Org\_Text\_01 ».

«LTR\_H2O\_Org\_Text\_03 »

## Cross Connection Control Program Inspection Compliance Notice

«Current date:Month Day, Year»

«Mailing\_Address »

**RE: «LTR\_Facility\_Name » at «[Facility]Service Address Num Alpha» «[Facility]Service Address Street Name»**

Dear «Mail\_Greeting »

The purpose of the City of Rochester Hills Cross Connection Control Program, as defined in Ordinance «LTR\_H2O\_Org\_Ordinance », is to help eliminate possible contamination of the public water distribution system. There are two required components of the program; 1) site inspection, and 2) testing of backflow prevention assemblies.

As part of this program, an inspection of your facility's internal water distribution system was completed on «LTR\_Survey\_Comp\_Date :Month Day, Year». Inspectors reviewed your water distribution system for any piping or connections that could possibly contaminate the water distribution system.

**Your facility was either found compliant and/or the necessary changes made to comply with Ordinance «LTR\_H2O\_Org\_Ordinance ».** This inspection is valid until your facility's next scheduled inspection date. You will receive future notice for your next inspection date.

***If your facility has backflow prevention assemblies requiring testing, you will be receiving additional notice detailing test requirements.***

If you have any questions or require additional information, please contact «LTR\_H2O\_Org\_Text\_01 ».

«LTR\_H2O\_Org\_Text\_03 »

## Cross Connection Control Program Containment Compliance Notification

«Current date:Month Day, Year»

«Mailing\_Address »

**RE: «LTR\_Facility\_Name » at «[Facility]Service Address Num Alpha» «[Facility]Service Address Street Name»**

Dear «Mail\_Greeting »,

A Cross Connection Control inspection was performed at your facility. At that time, it was determined that your facility's potable water system is "contained" by an approved, properly installed backflow prevention device or assembly at the main inlet which is intended to minimize the potential backflow threat to the City of Rochester Hills public water system. Therefore, your facility has met the intent of the inspection portion of the Cross Connection Program as defined in Ordinance «LTR\_H2O\_Org\_Ordinance ». Compliance with the inspection portion of the program requirements shall remain in effect until your facility's next scheduled inspection date.

However, to fully meet the intent of the CCC Program, two- (2) items must be addressed:

1. Inspection of the facility: **Completed**
2. Successful annual testing of any existing testable backflow prevention assemblies within your facility.

This facility will be in **Compliance** with the Cross Connection Control Program when the existing backflow prevention assemblies are tested this year and at yearly intervals hereafter. When it is necessary to test such assemblies your facility will receive a notification letter, test forms to be completed by a certified tester for each identified testable assembly, and a list of certified testers within your facility's area. Upon the successful testing of the backflow prevention assembly, please submit a copy of the completed test record(s) to Hydro Designs.

Note however it is still possible for existing cross connections within your facility to potentially affect the water quality within your internal plumbing system. The installation of an approved backflow preventer at the main inlet does not relieve your facility of the responsibility of providing potable water to your employees and the public. In order to comply with all applicable codes and laws, it is recommended that your facility:

- Have a cross connection control survey of the potable water piping system performed within your facility
- Ensure all piping systems downstream of the containment device/assembly are labeled properly
- Ensure backflow prevention assemblies connected to the potable water supply within your facility are tested annually

If you have any questions or require additional information, please contact «LTR\_H2O\_Org\_Text\_01 ».

«LTR\_H2O\_Org\_Text\_03 »

## Request for Internal Cross Connection Control Information Notice

«Current date:Month Day, Year»

«Mailing\_Address »

**RE: «LTR\_Facility\_Name » at «[Facility]Service Address Num Alpha» «[Facility]Service Address Street Name»**

Dear «Mail\_Greeting »,

The purpose of the City of Rochester Hills Cross Connection Control Program, as defined in Ordinance «LTR\_H2O\_Org\_Ordinance », is to help eliminate possible contamination of the public water distribution system. There are two required components of the program; 1) site inspection, and 2) testing of backflow prevention assemblies.

As specified by Ordinance «LTR\_H2O\_Org\_Ordinance », your facility is required to supply potable water free of existing and/or potential cross connections to its employees and/or the public. Due to the complexity of your internal piping, an inspection of the potable water piping system is necessary to determine if there are any existing and/or potential cross connections. This inspection must be completed by an individual or firm acceptable to the "[Insert Client Name]".

The Potable Water Cross Connection Survey Report is to be submitted within 30 days from the date of this notice. Accompanied with the Potable Water Piping Cross Connection Survey Report shall be an Action Plan and timetable for correcting any deficiencies noted in the report.

If you have any questions or require additional information, please contact Hydro Designs, Inc. at **1.800.690.6651**. Your facility's cooperation in this matter is greatly appreciated.

## Inspection Non-Compliance Notice 1

«LetterSentDate :Month Day, Year»

«Mailing\_Address »

**RE: «LTR\_Facility\_Name » at «[Facility]Service Address Num Alpha» «[Facility]Service Address Street Name»**

Dear «Mail\_Greeting »

The purpose of the City of Rochester Hills Cross Connection Control Program, as defined in Ordinance «LTR\_H2O\_Org\_Ordinance », is to help eliminate possible contamination of the public water distribution system. There are two required components of the program; 1) site inspection, and 2) testing of backflow prevention assemblies.

An inspection of your facility's internal water distribution system was completed on «LTR\_Survey\_Last\_Date ». Inspectors reviewing your water system found connections that could possibly contaminate the public water distribution system. A list of requirements is enclosed.

Requirements on this list must be addressed using only State approved backflow prevention devices. A licensed plumber should be able to assist you with acquiring approved backflow prevention devices. Some backflow prevention devices (assemblies) also require testing by a State Certified Tester. We suggest that the licensed plumber installing the testable assemblies also have the state certification to test assemblies. ***All testable assemblies must be tested immediately at the time of installation.***

**These requirements must be completed by «LTR\_Survey\_Response\_Date ». After the requirements and devices have been installed (if applicable) please call the number below on or before the date listed above to schedule a compliance inspection. Failure to do so will result in future non-compliant notices.**

To arrange for a compliance review or if you require additional information, please contact «LTR\_H2O\_Org\_Text\_01 »

«LTR\_H2O\_Org\_Text\_03 »

## Inspection Non-Compliance Notice 2

«LetterSentDate :Month Day, Year»

«Mailing\_Address »

**RE: «LTR\_Facility\_Name » at «[Facility]Service Address Num Alpha» «[Facility]Service Address Street Name»**

Dear «Mail\_Greeting »

The purpose of the City of Rochester Hills Cross Connection Control Program, as defined in Ordinance «LTR\_H2O\_Org\_Ordinance », is to help eliminate possible contamination of the public water distribution system. There are two required components of the program; 1) site inspection, and 2) testing of backflow prevention assemblies.

As part of this program, an inspection of your facility's internal water distribution system was completed on «LTR\_Survey\_Last\_Date ». Inspectors reviewing your water system found connections that could possibly contaminate the public water distribution system. A letter of notification was previously sent to you outlining the required corrective measures. For your reference, a duplicate list of requirements is enclosed.

Requirements on this list must be addressed using only State approved backflow prevention devices. A licensed plumber should be able to assist you with acquiring approved backflow prevention devices. Some backflow prevention devices (assemblies) also require testing by a State Certified Tester. We suggest that the licensed plumber installing the testable assemblies also have the state certification to test assemblies. ***All testable assemblies must be tested immediately at the time of installation.***

**These requirements must be completed by «LTR\_Survey\_Response\_Date ». After the requirements and devices have been installed (if applicable) please call the number below on or before the date listed above to schedule a compliance inspection. Failure to do so will result in future non-compliant notices.**

To arrange for compliance review or if you require additional information, please contact «LTR\_H2O\_Org\_Text\_01 ».

«LTR\_H2O\_Org\_Text\_03 »

## Cross Connection Control Program Inspection Shut-Off Notice

«LetterSentDate :Month Day, Year»

«Mailing\_Address »

**RE: «LTR\_Facility\_Name » at «[Facility]Service Address Num Alpha» «[Facility]Service Address Street Name»**

Dear «Mail\_Greeting »

The purpose of the City of Rochester Hills Cross Connection Control Program, as defined in Ordinance «LTR\_H2O\_Org\_Ordinance », is to help eliminate possible contamination of the public water distribution system.

As part of this program, an inspection of your facility's internal water distribution system was completed on «LTR\_Survey\_Last\_Date :Month Day, Year». Inspectors reviewing your water system found connections that could possibly contaminate the public water distribution system. Two- (2) previous letters of notification were sent to you outlining the required corrective measures. For your reference, a duplicate list of requirements is attached.

We presently have no record or notification from you that corrective action has been completed. If you have already completed the requirements, please call the number below to schedule a compliance inspection.

**You are hereby notified that in accordance with Ordinance «LTR\_H2O\_Org\_Ordinance », the water supply to the above noted premises will be discontinued as of «LTR\_Survey\_Response\_Date ». Water service may not be resumed until corrective measures have been addressed.**

Upon completion of the required corrective action, please contact Hydro Designs, Inc. on or before the above date at 1.800.690.6651 to schedule a compliance review.

«LTR\_H2O\_Org\_Text\_04 »

Sincerely,

«LTR\_H2O\_Org\_Contact\_Person »

«LTR\_H2O\_Org\_Text\_04 »

## Annual Test Notice

**TEST FORM DUE NO LATER THAN: "[Insert notice response date]"**

"[Insert date]"

"[Insert mailing address]"

***RE: "[Insert facility name]" at "[Insert facility address]"***

Dear "[Insert greeting]" ,

The purpose of the City of Rochester Hills Cross Connection Control Program, as defined in Ordinance "[Insert Ordinance number]" , is to help eliminate possible contamination of the public water distribution system. There are two required components of the program; 1) site inspection, and 2) testing of backflow prevention assemblies.

This correspondence addresses testing of backflow prevention assemblies, and is independent of previous correspondence pertaining to site inspection(s). Periodic testing of backflow prevention assemblies is required to ensure proper working order.

Our records indicate it is time for testing of backflow prevention assemblies at your facility. The enclosed preprinted test forms are the only test forms that will be accepted. Testing should be completed in advance of the completion date noted to allow for repair(s) should they be necessary. Testing of backflow prevention assemblies must be completed by a State approved certified tester. A partial listing is attached for reference.

Following completion of assembly testing and/or repairs, completed test forms shall be sent via e-mail to [testforms@hydrocorpinc.com](mailto:testforms@hydrocorpinc.com).

Backflow prevention assemblies within the City of Rochester Hills are required to be tested on an annual basis. Our records indicate that we have not received the annual test reports on the following backflow assemblies enclosed with this letter.

Completed test forms are to be returned by "[Insert notice response date]" . Please retain a copy of the device test results for your records.

If you have any questions or require additional information, please contact me at "[Insert phone number]" .

Sincerely,

"[Insert inspector name]"  
"[Insert inspector title]"

## Test Notice #2

**TEST FORM DUE NO LATER THAN: "[Insert notice response date]"**

"[Insert date]"

"[Insert mailing address]"

***RE: "[Insert facility name]" at "[Insert facility address]"***

Dear "[Insert greeting]" ,

The purpose of the City of Rochester Hills Cross Connection Control Program, as defined in Ordinance "[Insert Ordinance number]" , is to help eliminate possible contamination of the public water distribution system. There are two required components of the program; 1) site inspection, and 2) testing of backflow prevention assemblies.

This is your **second notice** pertaining to testing of backflow prevention assemblies, and is independent of previous correspondence pertaining to site inspection(s). Periodic testing of backflow prevention assemblies is required to ensure proper working order.

Our records indicate 1) it is time for testing of backflow prevention assemblies at your facility and that 2) you have not yet returned the previously provided test forms. For your convenience, we have enclosed additional preprinted test forms. Testing of backflow prevention assemblies must be completed by a Michigan Registered Tester. A partial listing is attached for reference.

Following completion of assembly testing and/or repairs, completed test forms shall be sent via e-mail to [testforms@hydrocorpinc.com](mailto:testforms@hydrocorpinc.com).

Completed test forms are to be returned by "[Insert notice response date]" . Please retain a copy of the device test results for your records.

If you have any questions or require additional information, please contact me at "[Insert phone number]" .

Sincerely,

"[Insert inspector name]"

"[Insert inspector title]"

## Testing Shut-Off Notice

TEST FORM DUE NO LATER THAN: "[Insert notice response date]"

"[Insert date]"

"[Insert mailing address]"

**RE: "[Insert facility name]" at "[Insert facility address]"**

Dear "[Insert greeting]" ,

The purpose of the City of Rochester Hills Cross Connection Control Program, as defined in Ordinance "[Insert Ordinance number]" , is to help eliminate possible contamination of the public water distribution system. There are two required components of the program; 1) site inspection, and 2) testing of backflow prevention assemblies.

This is your **third notice** pertaining to testing of backflow prevention assemblies, and is independent of previous correspondence pertaining to site inspection(s). Periodic testing of backflow prevention assemblies is required to ensure proper working order.

Our records indicate that you have not yet returned the previously provided test forms. For your convenience, we have enclosed additional preprinted test forms. Testing of backflow prevention assemblies must be completed by a State approved certified tester. A partial listing is attached for reference.

**You are hereby notified that in accordance with Ordinance "[Insert Ordinance number]" , the water supply to the above noted premises will be discontinued as of "[Insert notice response date]" . Water service may not be resumed until testing of backflow prevention assemblies has been completed.**

Following completion of assembly testing and/or repairs, completed test forms shall be sent via e-mail to [testforms@hydrocorpinc.com](mailto:testforms@hydrocorpinc.com).

Please retain a copy of the device test results for your records. If you have any questions or require additional information, please contact the undersigned at "[Insert phone number]" .

Sincerely,

"[Insert inspector name]"

"[Insert inspector title]"

**APPENDIX D - TEST FORM**

# BACKFLOW PREVENTION ASSEMBLY TEST REPORT

**Hydro Designs, Inc.**

BFP ID		Facility Name				
Acct Number		Meter #		Test Report Due:		
Service Address				Schedule Code		
				Assembly Info (Replacement/Correction)		
Equip Location		Protection Type		SN	<input type="checkbox"/>	
Location ID				Mfr	<input type="checkbox"/>	
Contact Name		Ph		Type	<input type="checkbox"/>	
Map Page		#2		Size	<input type="checkbox"/>	
				Model	<input type="checkbox"/>	
				Install Date		
				Permit Num		
		Hazard Type		Haz. Level		
Line pressure at time of test: _____ <b>REPORT OF TEST RESULTS</b> <input type="checkbox"/> Approved BFP						
	<b>Check Valve #1</b>	<b>Check Valve #2</b>	<b>Relief Valve</b>	<b>PVB/SVB</b>	<b>Shut Off Valves</b>	
<b>Initial Test</b>	<input type="checkbox"/> Held at _____ PSID <input type="checkbox"/> Closed Tight <input type="checkbox"/> Leaked	<input type="checkbox"/> Held at _____ PSID <input type="checkbox"/> Closed Tight <input type="checkbox"/> Leaked	<input type="checkbox"/> Opened at _____ PSID  <input type="checkbox"/> Did Not Open	<input type="checkbox"/> Air Inlet Opened at _____ PSID <input type="checkbox"/> Did not Open <input type="checkbox"/> Check Held at _____ PSID <input type="checkbox"/> Leaked	Closed Tight	#1 <input type="checkbox"/> #2 <input type="checkbox"/>
<b>Pass</b>					Leaked	<input type="checkbox"/> <input type="checkbox"/>
<b>Fail</b>						<input type="checkbox"/> <input type="checkbox"/>
<b>R E P A I R</b>	<input type="checkbox"/> CLEANED <input type="checkbox"/> REPLACED	<input type="checkbox"/> CLEANED <input type="checkbox"/> REPLACED	<input type="checkbox"/> CLEANED <input type="checkbox"/> REPLACED	<input type="checkbox"/> CLEANED <input type="checkbox"/> REPLACED	CLEANED REPLACED	<input type="checkbox"/> <input type="checkbox"/>
	<input type="checkbox"/> Disc <input type="checkbox"/> Spring <input type="checkbox"/> Guide <input type="checkbox"/> Seat <input type="checkbox"/> Hinge Pin <input type="checkbox"/> Diaphragm <input type="checkbox"/> Module <input type="checkbox"/> _____	<input type="checkbox"/> Disc <input type="checkbox"/> Spring <input type="checkbox"/> Guide <input type="checkbox"/> Seat <input type="checkbox"/> Hinge Pin <input type="checkbox"/> Module <input type="checkbox"/> _____	<input type="checkbox"/> Disc <input type="checkbox"/> Spring <input type="checkbox"/> Diaphragm <input type="checkbox"/> Seat <input type="checkbox"/> O-Ring(s) <input type="checkbox"/> Module <input type="checkbox"/> _____	<input type="checkbox"/> Disc <input type="checkbox"/> Spring <input type="checkbox"/> Diaphragm <input type="checkbox"/> Seat <input type="checkbox"/> O-Ring(s) <input type="checkbox"/> Module <input type="checkbox"/> _____	<input type="checkbox"/> Air Inlet Disc <input type="checkbox"/> Air Inlet Spring <input type="checkbox"/> Check Disc <input type="checkbox"/> Check Spring <input type="checkbox"/> Float <input type="checkbox"/> Diaphragm <input type="checkbox"/> _____	REPAIR
	Other/Notes: _____ _____					
<b>Final Test</b>	_____ PSID <input type="checkbox"/> Closed Tight	_____ PSID <input type="checkbox"/> Closed Tight	<input type="checkbox"/> Opened at _____ PSID	Air Inlet _____ PSID CK Valve _____ PSID	Closed Tight	<input type="checkbox"/> <input type="checkbox"/>
					<b>Pass</b>	<input type="checkbox"/>
<b>THE ABOVE REPORT IS CERTIFIED TO BE TRUE:</b>						1A
Initial Test By	Certificate	Date:	Gauge Num	Time In	Time Out	Company
Final Test By						Phone
Repair By						