



**CROSS CONNECTION CONTROL PROGRAM FOR
SECONDARY TREATMENT SYSTEMS**

*Issued under authority of 1976 PA 399, as amended, MCL 325.1001 et seq., and its administrative rules (Act 399).
Failure to submit this form is a violation of Act 399 and may subject the water to enforcement actions.*

Cross Connection Control Program For

Supply Name: _____

WSSN: _____

Introduction

In accordance with the requirements set forth by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), _____ has officially adopted State of Michigan recognized cross connection controls to protect water systems. A cross connection is defined as a connection or arrangement of piping or appurtenances through which 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 _____ intent to carry out a comprehensive and effective cross connection control program to ensure public health is protected and the requirements of the Michigan Safe Drinking Water Act (Act 399) are met.

Program Approach

The objectives of this program will be met primarily by:

- Routinely inspecting the facility's water piping and fixtures for existing or potential cross connections
- Testing all testable backflow prevention assemblies
- Maintaining cross connection control records
- Maintaining backflow prevention education and training for applicable staff (facility staff shall understand the potential for cross connections and how to prevent them)
- Reporting the status of the program to EGLE

_____ shall ensure that there are adequate personnel and resources to carry out the necessary inspection and administrative requirements for this program. _____ adopts the EGLE Cross Connection Rules Manual as a guide to prevent and eliminate cross connections and to define terms. The manual is available at the following link:

[Cross Connection Manual](#)

(Michigan.gov/Documents/DEQ/CrossConnectionManual_251521_7.pdf)

Inspections

The water connections and plumbing systems throughout the facility shall be initially inspected for the presence of cross connections. The water supply shall designate an individual 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 tracing the piping within the facility from the point(s) where water service enters (usually the meter) to each end point of use. The inspector shall identify and note the location and nature of any direct and potential cross connections, location and details of backflow prevention devices/assemblies, and other pertinent information.

The EGLE Cross Connection Rules Manual will be a guide in classifying the degree of hazard of each area. Generally, situations in which backflow could cause illness or death shall be considered a high hazard. The highest priority for inspections shall be placed on areas of the facility that pose a high degree of hazard, have a high probability that back flow will occur, or are known/suspected to have cross connections.

Inspection frequency for each area shall be based on the degree of hazard and potential for backflow. Supplies may choose to inspect different areas of the facility during different years so that the entire facility receives inspection across multiple years. However, areas with the potential for high hazard cross connections or that have a high potential for backflow to occur, must be re-inspected at least once per year. Other factors, such as new construction or water quality problems, may prompt an immediate re-inspection. A comprehensive list or inventory of all backflow prevention devices shall be on record, including all pertinent data.

Hospitals and health care facilities may have features or areas that require special consideration. Refer to the appendix for a detailed list of special areas or equipment commonly found in hospitals or healthcare settings.

Testing Backflow Prevention Assemblies

When all initial inspections have been completed, a comprehensive list of the facility's backflow preventors (size, make, model, location, serial number, etc.) will be on record. The backflow preventors that are testable assemblies shall be tested annually. The testing or repair of backflow prevention assemblies must only be performed by a master plumber, journey plumber, or an apprentice plumber under the direct supervision of a journey or master plumber. Additionally the individual performing the testing must hold an active ASSE 5110 Certification. Forms for this testing may be found in the EGLE Cross Connection Rules Manual Appendix.

Assembly testing reports shall contain the following:

- Name and certification number of the tester
- The make, model, and identifying number of the assemblies tested
- Verification that each assembly is ASSE certified
- Confirmation that the test results are valid
- Confirmation that the assembly tested matches the assembly requiring testing
- Initial test results, any repairs made, and final test results

Cross connection control program staff shall review any questionable test results with the tester. Failure to perform a required backflow prevention assembly test or pass a test constitutes a cross connection and must be corrected.

Record Keeping

A system of cross connection control record keeping shall be maintained. Special software for cross connection records may be helpful for record searches, reporting, and updating findings.

Cross connection control records shall include the following:

- Lists of testable assemblies
- Descriptions of cross connections found from inspections
- The presence and locations of air gaps
- Lists of non-testable devices
- Degree of hazard classification and basis
- Required re-inspection frequency
- Photos or sketches if available
- Reports on testable assemblies

Copies of the written cross connection control program and EGLE approval letters should be kept on file. Copies of the EGLE annual reports shall be kept for a minimum of 10 years.

Education

Cross connection control program staff must have a good understanding of the program. _____ shall ensure their designated program staff receive proper hands-on training as well as classroom education focusing on terminology, backflow prevention devices, regulations, and hydraulic concepts. In addition, the staff will be encouraged to receive continuing education to be made aware of new backflow prevention devices, regulation changes (i.e., plumbing code updates), new water use devices that pose cross connection concerns, etc. _____ shall educate staff facility-wide to make them aware of the ongoings and requirements of the program.

Annual Reports

Part 14 of the Michigan Safe Drinking Water Act provides the requirements for reporting on the status of cross connection control programs to EGLE. The annual reports should summarize 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 inconsistent numbers or significant events such as:

- Backflow prevention training conducted
- Coordinated activities with the primary water supplier
- Plumbing changes approved by the code inspector

Signatures**Water Supply Administrative Contact**

I hereby certify that a properly trained individual is designated to run this cross connection control program and that the program requirements are enforced.

Name: _____ Title: _____
(Print Name)

Signature: _____ Date: _____

Individual Designated to Implement Cross Connection Control Program

I hereby certify that this cross connection control program shall be properly implemented and that any problems will be reported to the above-named administrator.

Name: _____ Title: _____
(Print Name)

Signature: _____ Date: _____

Report Submission:

Submit the completed cross connection report to the email or mailing addresses listed below:

EGLE-ST@Michigan.gov

Michigan Department of Environment, Great Lakes, and Energy
Drinking Water and Environmental Health Division - Secondary Treatment
P.O. Box 30817
Lansing, Michigan 48909-8311

Appendix

Backflow prevention in hospital and health care settings is crucial to the protection of vulnerable populations. In addition to what can be found in traditional commercial settings, these facilities may have the following unique features or areas for backflow prevention:

- Fire prevention piping systems
- Extensive lawn sprinkling systems
- Bed floors with ice or beverage machines
- Water loops containing glycol antifreeze
- Rooftop equipment such as air handlers, cooling towers, and water taps intended for power washing this equipment
- Areas where biohazardous material is present
- Specialized equipment, such as kidney dialysis machines, with direct connections to the water supply
- Chemical-based cooling systems for equipment, such as MRI machines
- Decontamination and special-purpose washing rooms
- Laboratories
- Clinical sinks
- Commercial kitchens
- Commercial laundry rooms

If you need this information in an alternate format, contact EGLE-Accessibility@Michigan.gov or call 800-662-9278.

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