

# Cross-Connection Control Section 21

February 2021

Authority to disconnect for non-compliance of correcting cross-connection.

CCC Program is required. Must include designated, trained and experienced person, recordkeeping, hazard assessment policy/procedures.

Program shall include complete assessments of customer premises for potential hazards and classify premises of High or Low Hazard

Containment Required under these conditions:

Optional Public EDU for Low Hazard Services – Specific Education Components

Detailed Recordkeeping and retention for no less than 10 years

Non-Compliance and Penalty of not implementing CCC Program

**21. Cross-Connection Control**  
**21.1. Cross-connection control requirements and prohibitions.**  
 21.1.1. No public water system shall install or maintain a water service connection to any premises where actual or potential cross-connections to a public water system exist unless such actual or potential cross-connections are eliminated or controlled to the satisfaction of the owner of the public water system and the Division.  
 21.1.2. No public water system shall install or maintain any connection whereby water from an auxiliary water system may enter a public water system unless the auxiliary water supply and the method of connection.  
 21.1.3. In accordance with subsection 1.12.1.4., public water systems shall maintain acceptable water pressure throughout the distribution system so that the risk of backflow is reduced.  
 21.1.4. If a cross-connection exists or backflow occurs at a consumer's water system, the public water system may discontinue service to the consumer and water service shall not be restored until the deficiencies have been corrected.  
**21.2. Cross-connection control programs.**  
 21.2.1. A public water system shall develop a plan for a comprehensive cross-connection control program for the elimination, prevention, and control of cross-connections appropriate to the number of service connections, size of the distribution system, and type of customers. The cross-connection control program shall include an individual designated by the public water system and appropriately trained and experienced in cross-connection control programs to be responsible for the program.  
 21.2.2. A cross-connection control program shall include an inventory and records of testing, repairs, and maintenance of all backflow prevention assemblies, and backflow elimination methods.  
 21.2.3. A cross-connection control program shall include appropriate policies to complete assessments of customer premises for potential cross-connections to establish hazard criteria to classify customer premises consistent with Table 1, and to determine the degree of hazard and adequacy of existing preventive measures.  

Premise -Degree of Hazard	
High Hazard	Low Hazard
Air Gap	Air Gap
Reduced Pressure Principle Backflow Prevention Assembly	Reduced Pressure Principle Backflow Prevention Assembly
	Double Check Valve Assembly

 21.2.4. An approved backflow prevention assembly or backflow elimination method shall be installed at premises where the following conditions exist in a location intended to prevent backflow into the distribution system:  
 21.2.4.1. Premises having auxiliary water system:  
 21.2.4.2. Premises types that are deemed by the public water system or the Division to represent a health or high hazard to the public water system, to include but not be limited to:  

<i>Agricultural facilities (e.g., farms, dairies)</i>	<i>Beverage bottling plants</i>	<i>Car washes</i>
<i>Chemical plants</i>	<i>Dry cleaners (on site processing)</i>	<i>Film processing plants</i>
<i>Food processing plants</i>	<i>Laboratories</i>	<i>Medical facilities</i>
<i>Mortuaries</i>	<i>Metal plating industries</i>	<i>Mortuaries</i>
<i>Petroleum processing/storage plants</i>	<i>Piers, marinas, docks and waterfront facilities</i>	
<i>Radioactive material processing plants</i>	<i>Wastewater treatment facilities</i>	

 21.2.4.3. Premises where having internal cross-connections that, in the judgment of the public water system, are not correctable or are impractical to determine if cross-connections exist due to intricate plumbing arrangements.  
 21.2.4.4. Premises where because of security requirements or other prohibitions, it is impossible to complete a cross-connection control survey; or  
 21.2.4.5. Premises having a history of cross-connections being established or reestablished.  
 21.2.5. In lieu of assessments and installation of backflow prevention assemblies at customer premises deemed low hazard, a public water system may implement a public education program.  
 21.2.5.1. The public education program shall include, at minimum:  
 21.2.5.1.1. Causes and dangers of backflow and cross-connections, including health effects;  
 21.2.5.1.2. Information on how to identify actual and potential cross-connections;  
 21.2.5.1.3. Preventive measures to reduce or eliminate cross-connection and backflow risks; and  
 21.2.5.1.4. Information on reporting suspected cross-connections to the  
**21.3. Corrections and protective devices.**  
 21.3.1. Backflow prevention assemblies shall conform to the standards of the American Society of Sanitary Engineering (ASSE), the American Water Works Association (AWWA), and the American Society of Mechanical Engineers (ASME)  
**21.4. Cross-connection control records and reporting.**  
 21.4.1. All backflow prevention assembly test records which document the test results of assemblies designed to protect the public water system shall be retained on file for a period of no less than 10 years.  
 21.4.2. All cross-connection control survey records which document results from the monitoring of cross-connections shall be retained on file for a period of no less than 10 years.  
**21.5. Violations.**  
 21.5.1. The following items shall be deemed to be violations of these regulations:  
 21.5.1.1. Failure to develop and implement a comprehensive cross-connection control program in accordance with Section 3.0 of this regulation within three years of the effective date of these regulations;  
 21.5.1.2. Failure to implement the cross-connection control program as prescribed; and  
 21.5.1.3. Failure to maintain all backflow prevention assembly test records on file for at least 10 years.  
**21.6. Penalty Clause.**  
 Any person who neglects or fails to comply with these regulations shall be subject to penalty as provided in 16 Del.C. §122(3)(c).