

City of Weiser Cross Connection ordinance 1217

CROSS-CONNECTIONS

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7-4-1: **PURPOSE:** The purpose of this ordinance is to provide a basis for implementing the State of Idaho Drinking Water Regulations, enacted to ensure safe drinking within the water systems which serve the public.

Any interpretations of this Chapter regarding scope, intent, degree of hazard or type of protection required, will be subject to the current accepted guidelines of the State of Idaho at the time of the interpretation, and the regulations established herein. (Ord. 1140, 12-9-2002)

7-4-2: **DEFINITIONS:** As used in this Chapter, unless the context indicates otherwise, the following shall apply:

AIR GAP SEPARATION: The physical, vertical separation between the free flowing discharge end of a potable water supply pipe line and the open or non-pressure receiving vessel.

APPROVED BACK FLOW PREVENTION ASSEMBLY: - An assembly which has been approved by the State and this City, for preventing backflow.

ATMOSPHERIC VACUUM BREAKER: (Also known as an anti-siphon valve), A device consisting of a single check valve in the supply line that opens to the atmosphere when the pressure in the line drops to atmospheric.

AUXILIARY WATER SUPPLY: Any supply of water used to augment the supply obtained through the Purveyor's water system which serves the premises in question.

Backflow. The reverse from normal flow direction in a plumbing system or water system caused by back pressure or back siphonage

BACKFLOW PREVENTION ASSEMBLY TESTER: An individual who is certified by the State and registered with the Purveyor, to test backflow prevention assemblies.

CHECK VALVE: A valve that permits flow in only one direction.

CONTAMINANT: Any physical, chemical, biological, or radiological substance or matter in water which may render the water nonpotable, according to State regulations.

CROSS CONNECTION: Any actual or potential connection or piping arrangement between a public or a consumer's potable water system and any other source or system through which it is possible to introduce into any part of the potable water system used water, water from any source other than an approved public water system, industrial fluid, gas or substance other than the intended potable water with which the system is supplied. Cross connections include bypass arrangements, jumper connections, removable sections, swivel or change-over devices and other temporary or permanent devices which, or because of which "backflow" can or may occur.

CROSS-CONNECTION INSPECTOR: An individual approved by the Purveyor, to inspect for cross-connections.

Cross Connection Control Manual: The most current version of the "Cross Connection Control Manual" published by the Pacific Northwest Section of the American Water Works Association is hereby adopted as the standard for cross connection control and back flow prevention devices.

CUSTOMER SYSTEM: All plumbing, piping, and appurtenances on the customer's side of the point of metering or connection in the case of fire systems generally at or near the property line.

DOUBLE CHECK VALVE ASSEMBLY: An assembly of two (2) independently acting check valves with a shut off valve on each side of the two (2) check valves. The assembly also has test ports for checking the water tightness of each check valve. The assembly must be an approved Backflow Prevention Device.

DOUBLE DETECTOR CHECKVALVE ASSEMBLY: Same as a double check valve assembly with the addition of a water meter and an additional Double Check Valve assembly bypassing the main line assembly for the purpose of measuring low or proportional flow. The assembly must be an approved backflow prevention assembly.

FACILITY SURVEY: An on-site review of the water source, facilities, equipment, operation, and maintenance practices for the purpose of evaluating the hazards to the drinking water supply.

PRESSURE VACUUM BREAKER ASSEMBLY: A mechanical assembly consisting of one spring loaded check valve in the supply line and a spring loaded air inlet on the downstream side of the check valve which will open to atmosphere when the pressure in the assembly drops below one pound per square inch. The assembly consists of two (2) shut off valves and two (2) test ports for checking water tightness of the check valve. The assembly must be an approved backflow prevention assembly.

The City of Weiser does not recognize pressure vacuum breaker assemblies as approved for lawn sprinkler or irrigation systems.

PURVEYOR: The City of Weiser or its authorized agents.

REDUCED PRESSURE BACKFLOW (RP): An assembly for preventing backflow incorporating two (2) check valves, a differential relief valve located between the two (2) check valves, two (2) shut-off valves, one on each end of the assembly, test ports for checking water tightness of the check valves and the operation of the relief valve. The assembly must be an approved backflow prevention assembly.

REDUCED PRESSURE DETECTOR ASSEMBLY (RPD): Same as an RP assembly with the addition of a water meter and an additional RP assembly bypassing the main line assembly for the purpose of measuring low or proportional flow. The assembly must be an approved backflow prevention assembly.

SAFE DRINKING WATER: (Potable Water) Water which has sufficiently low concentrations of microbiological, inorganic chemical, organic chemical, radiological or physical substances so that individuals drinking such water at normal levels of consumption will not be exposed to disease organisms or other substances which may produce harmful physical effects.

SECONDARY CONTAMINANT: Contaminants which at levels generally found in drinking water do not present unreasonable risk to health, but do adversely affect taste, odor or color.

SERVICE CONNECTION: The point of water delivery to the customer at the meter, or in the case of fire systems, generally at or near the property line.

7-4-3: CUSTOMER SYSTEM OPEN FOR INSPECTION: The customer system shall be open for "Facility Survey" at all reasonable times to the Purveyor to determine whether cross-connections or other structural or sanitary hazards including violations of these regulations exist. When such a condition becomes known, the Purveyor shall cause the service to the premises to be immediately discontinued or denied by a physical break in the service until the customer has corrected the condition in conformance with these regulations.

7-4-4: BACKFLOW PREVENTION REQUIREMENTS: Backflow prevention assemblies shall be installed on each service line of a customer's system at or near the property line or immediately inside the building being served, but in all cases before the first branch line leading off the service line wherever any of the following conditions exist:

1. There is an auxiliary water supply which is, or could be, connected to the potable water piping.
2. Where there is piping for conveying liquids other than potable water, and where that piping is installed and operated in a manner which could cause a cross-connection.
3. There are cross-connections or intricate plumbing which make it impractical to ascertain whether or not a cross-connection exists.
4. In the case where there has been a history of repeating the same or similar cross-connection or a backflow, even though these have been removed or disconnected.
5. Where there is a building over two (2) stories in height or any plumbing system that is greater than or equal to thirty feet (30') above the water main from which it is served.
6. Where fire hydrants or fire systems are connected to the potable domestic water service within the property being served.
7. Where a single water service is used to supply three (3) or more dwellings.
8. Where the water meter serving the property is one and one half inches (1½") or larger.
9. Where there is backflow or backsiphonage potential.
10. Where any fixture is subject to being submerged.
11. Where the system is not open for inspection

7-4-5: TYPE OF BACKFLOW PROTECTION REQUIRED: The type of protection required shall be commensurate with the degree of hazard which exists as follows:

1. An approved air gap of at least twice the inside diameter, but not less than one inch (1"), of the incoming supply line measured vertically above the top rim of the vessel, or an approved reduced pressure backflow prevention assembly shall be installed where the substance which could backflow is a "contaminant" or potentially hazardous to health. Examples of premises where these conditions may exist include hospitals, mortuaries, car washes, medical clinics, auxiliary water systems, boilers, sewage piping, etc.

2. An approved double check valve assembly shall be installed where the substance which could backflow is a secondary contaminant. Example would include landscape irrigation systems, multiple dwelling units served by a single water service, etc.

3. An approved pressure vacuum breaker or an atmospheric vacuum breaker shall be installed where the substance which could backflow is objectionable but does not pose a risk to health and where there is no possibility of backpressure in the down steam piping.

4. In the case of all private fire services, an approved backflow prevention assembly installed to the Purveyor's construction specifications shall be required. The Purveyor may require a monitoring meter or detection system to detect unauthorized use or leakage within the system. The type of backflow prevention assembly shall be as follows:

A. Low Hazard: Systems with or without a pumper connection but no auxiliary water supplies available, chemicals or additives, or other detectable cross-connections require an approved double check valve assembly.

B. High Hazard: Systems with auxiliary water supplies, chemical additives, or other detectable cross-connections shall require an approved reduced pressure backflow prevention assembly.

5. No water service shall be supplied to any newly constructed premises until the said premises has successfully passed the facility survey for cross connections and compliance with this ordinance.

7-4-6: APPROVAL OF ASSEMBLIES: All backflow prevention assemblies required under this ordinance shall be of a type and model approved by the State and this Purveyor.

7-4-7 Responsibilities.

(a) Assembly owner. It is the responsibility of all owners of premises where backflow assemblies are installed to abide by the conditions of this ordinance and to comply with the following:

1. Pay all costs associated with this ordinance including the purchase, installation, testing and repair of backflow prevention assemblies.
2. Install and maintain all backflow prevention assemblies in proper working order at all times, including repair as required, and in accordance with this ordinance and acceptable industry practice.
3. Annually test all backflow prevention assemblies, with such testing to be conducted by a certified Backflow Prevention Assembly Tester who is registered with the Purveyor and who provides a copy of the test results to the Purveyor. The annual test date shall be the anniversary date of the installation or one year from the date of the last testing of the device. The Purveyor at their discretion may send a notice of annual test prior to the annual test date to each backflow assembly owner; however the sole responsibility for annual testing and reporting remains with the assembly owner. In the event that this test is not performed within 10 business days of the annual test date, the backflow assembly owner shall inform the Purveyor when the test will be performed. It shall be a violation of this ordinance if any water backflow assembly owner fails to conduct the test of their backflow device in accordance with this section. Further, any backflow assembly holder found to be in violation of this section shall be subject to immediate termination of water services and any applicable fees.* Any special circumstances may be considered at the sole discretion of the Purveyor.
In the case of lawn sprinkler and irrigation systems, all backflow assemblies shall be tested;
 - a. immediately upon installation or activation of the assembly
 - b. any time the assembly has been taken out of and returned to service
 - c. prior to any use of irrigation system in the spring
4. Maintain all backflow prevention assemblies in a manner that allows them to be tested by a method that has been approved by the State of Idaho and the Purveyor.

(b) Licensed backflow prevention assembly tester. The licensed backflow prevention assembly tester shall comply with the following requirements:

1. Maintain a current Backflow Assembly Tester license with the State of Idaho
2. Annually register with the Purveyor
3. Maintain testing equipment in proper working condition.
4. Maintain the design or operation characteristics of all backflow prevention assemblies.
5. Ensure that devices are tested according to accepted industry practice and all State and City regulations.
6. Enter all required testing data; including license number and test gauge serial numbers, on cross connection test forms submitted to the Purveyor.
7. Provide a copy of the completed test report to the property owners and/or persons in charge of any premises and the Purveyor.
8. Properly tag all assemblies as inspected. All assembly inspection tags must have at minimum the following information:
 - a. The testers name and contact information including company name
 - b. The testers license number
 - c. Date of test
 - d. Identification of the assembly being tested (serial number)
9. Report test results to the Purveyor within 10 working days of testing. Any reports submitted after 10 working days are considered null and void and may only be accepted at the sole discretion of the Purveyor.
10. Revocation of registration. A tester's registration may be revoked by the Purveyor if it is determined that the tester has:
 - a. Falsely, incompletely, or inaccurately reported assembly test reports;
 - b. Used uncalibrated gauges;
 - c. Used improper testing procedures;
 - d. Created a threat to public health or the environment.
 - e. Violated any regulations pertaining to applicable City or State Law
11. Registration may only be reinstated upon review and at the sole discretion of the Purveyor.

7-4-8: PREVIOUSLY INSTALLED ASSEMBLIES: Backflow prevention assemblies which were approved at the time they were installed but are not on the current list of approved assemblies, shall be permitted to remain in service provided they are properly maintained, are commensurate with the degree of hazard, are tested annually, and perform satisfactorily. When assemblies of this type are moved, or require more than minimum maintenance, they shall be replaced by assemblies which are on the list of approved assemblies by the State and approved by the Purveyor.

7-4-9: ENFORCEMENT: The Purveyor shall cause the water service to the premises to be immediately discontinued or denied by a physical break in the service until the customer has corrected the condition in conformance with this ordinance. This shall include removal and/or confiscation of any jumper or device which may cause a cross connection. Service shall be discontinued in any of the following situations:

- A. When it becomes known that a condition such as a cross-connection, plumbing, structural or sanitary hazard, or other violation of this ordinance is present.
- B. In those cases of extreme emergency, and where an immediate threat to life or public health is found to exist.
- C. When, in other cases, the tests, repairs, and or replacement of assemblies or any other requirements within this ordinance are not performed.
- D. Upon any such circumstances deemed necessary by the purveyor to protect the public drinking water system.
- E. Only upon the customer's complete compliance with this ordinance shall the service be restored.

7-4-10: SEVERABILITY: The provisions of this ordinance are severable. If any portion of this ordinance is held by a court of competent jurisdiction to be invalid or unenforceable for any reason, such determination shall not affect the validity of the remainder of this ordinance or its application to any other ordinance.