# **CHAPTER 13.24**

# **CROSS CONNECTIONS AND CONTAMINATION OF CITY WATER**

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# 13.24.010: PURPOSE:

The purpose of this chapter is to protect the public health and welfare by controlling cross connections or other known sources or potential sources of contamination to the city water supply. (Ord. 3525, 2015)

# 13.24.015: APPLICABILITY:

The provisions of this chapter apply to all customers of the city of Coeur d'Alene's water system. (Ord. 3525, 2015)

#### 13.24.020: DEFINITIONS:

For the purpose of this chapter, the following terms shall be defined as follows:

BACKFLOW: The reverse from normal flow direction of water, or mixtures of water and other liquids, gases or other substances into the distribution lines of the city public water system from any source or sources.

BACKFLOW ASSEMBLY TESTER (BAT): A person who tests approved backflow prevention assemblies and holds a current backflow assembly tester (BAT) license issued in the state of Idaho for the purpose of conducting field performance tests and inspections of approved backflow prevention assemblies as defined in title 54, chapter 24 of Idaho Code.

BACKFLOW PREVENTION ASSEMBLY - APPROVED: An assembly approved by the city water superintendent that complies with the requirements of the Idaho rules for public drinking water systems (IDAPA 58.01.08). This assembly, when properly installed and maintained between the city water supply system and the terminus or point of ultimate use, prevents backflow.

BACKFLOW PREVENTION DEVICE - APPROVED: An air gap (AG) or atmospheric vacuum breaker (AVB) device or method approved by the city water superintendent that complies with the requirements of the Idaho rules for public drinking water systems (IDAPA 58.01.08). This device or method, when properly installed and maintained between the city water supply system and the terminus or point of ultimate use, prevents backflow.

CITY WATER SUPERINTENDENT: The person hired by the city to oversee the operation and maintenance of the city's water system or his or her designee.

CROSS CONNECTION: Any actual or potential connection or structural arrangement between a public or consumer's potable water system or any other source or system through which it is possible to introduce into any part of the city's public water system any used water, industrial fluid, gas, or substance other than the intended potable water with which the system is supplied. Bypass arrangements, jumper connections, removable sections, swivel or change over devices and other temporary or permanent devices through which or because of which backflow can occur are considered to be cross connections.

FIELD TEST KIT: An instrument, either mechanical or electronic in design, and all related fittings, tools, equipment and appurtenances necessary to conduct performance tests on approved backflow prevention assemblies.

PERFORMANCE TEST: The testing of an approved backflow prevention assembly using the latest test procedures, as defined by the University Of Southern California Foundation For Cross Connection Control And Hydraulic Research (USCFCCCHR) and consistent with the backflow assembly tester's most recent training course and/or practical exam to certify that the backflow prevention assembly is functioning properly and within factory tolerances as designed. (Ord. 3525, 2015)

# 13.24.030: UNLAWFUL CONTAMINATION OR CROSS CONNECTIONS:

It is unlawful for the owner, tenant, occupant, lessee or other user of city water to introduce or permit the introduction of pollution or contamination of any kind into the city water supply system. It is unlawful for any person receiving water from the city water system to install or maintain any cross connection within the city of Coeur d'Alene. (Ord. 3525, 2015)

# 13.24.040: BACKFLOW PREVENTION DEVICES AND ASSEMBLIES; REQUIREMENTS, INSTALLATION AND TESTING:

A. An approved backflow prevention device or assembly must be installed by the property owner, tenant, occupant,

lessee or other user of city water where the nature and extent of the activities conducted or the materials used or stored on the premises would present an actual or potential hazard to the public health or be deleterious to the quality of the city water supply should a cross connection occur. The need for a backflow prevention device or assembly must be reevaluated whenever a new potential hazard is introduced to the property. The backflow assembly must be installed in a manner that complies with city water department standard drawings. Even though cross connections may not exist at the time, an approved backflow prevention device or assembly must be installed under the following circumstances:

1. Premises having an auxiliary water supply (the unapproved auxiliary supply or well may be abandoned in the manner required by IDAPA 37.03.09 rather than installing a backflow prevention assembly/device. A subsequent inspection by the water superintendent will be required to determine that all cross connections have been eliminated at the property);

2. Premises having internal cross connections that are not correctable, or having intricate plumbing arrangements which make it impracticable to ascertain whether or not cross connections exist;

3. Premises where entry is restricted so that inspections for cross connections cannot reasonably be made;

4. Premises having a history of cross connections being established or reestablished;

5. Premises on which any substance is handled under pressure so as to permit the entry of such substance into the public water supply;

6. Premises having pumps or other assemblies that may exceed dynamic pressure in the city water mains and/or service lines between the mains and the meters.

B. All backflow prevention devices or assemblies shall be installed by the property owner at the owner's expense, and shall be of a type commensurate with the highest degree of hazard which exists or which could exist. Appropriate backflow protection shall meet the requirements of IDAPA 58.01.08.543.01 and IDAPA 58.01.08.552.06b. All backflow prevention assemblies and the installation thereof shall be approved by the city water superintendent.

C. All backflow prevention assemblies installed pursuant to this chapter, except atmospheric vacuum breakers, shall be inspected and pass an approved performance test by an Idaho licensed tester at the time of initial installation and annually thereafter. The city water superintendent may require more frequent testing if repeated performance failures, severe health hazards, repeated annual noncompliance, or other factors that pose a risk to the city public water system are encountered. Whenever a backflow prevention assembly is found to be defective, it shall be repaired, or overhauled with original manufacturer replacement parts, or replaced at the owner's expense. Only approved test cock fittings or protective caps will be installed in the assembly's test cocks. Test cocks will be kept free of other tangible physical matter at all times. The city water superintendent shall retain adequate records of all inspections, tests or repairs made pursuant to this chapter.

D. All residential and commercial irrigation backflow assemblies shall be tested annually at start up or before July 1 of each calendar year, whichever comes first.

E. If a backflow prevention assembly is found to be necessary, the owner, tenant, occupant or lessee of the property shall apply in writing to the city building department for a plumbing permit, specifying the type and location of such assembly. It is unlawful to install, relocate or remove a backflow prevention assembly without a permit. Any backflow prevention assembly that has been installed, relocated, removed, and reinstalled shall pass a performance test prior to being placed into service.

F. Pursuant to IDAPA 58.01.08.552.06.e if a backflow assembly fails testing and it cannot be repaired immediately, the tester must notify the city water superintendent of the failed test as soon as possible and in no event later than two (2) business days following the failed test. If the assembly cannot be repaired or replaced within ten (10) business days of notification, water service to the property may be terminated until the approved backflow prevention assembly can be repaired or replaced and pass a performance test.

G. A passing performance test report must be filed with the city water superintendent by the backflow assembly tester within twenty (20) calendar days of conducting the performance test. Test reports filed after this period of time may be considered invalid. (Ord. 3525, 2015)

# 13.24.050: INSPECTION OF NEW OR EXISTING STRUCTURES OR IMPROVEMENTS AND TERMINATION OF WATER SUPPLY:

Any new or existing building, improvement, or structure of any type receiving water from the city public water system shall be open, at all reasonable times, to inspections by the city water superintendent. Whenever a cross connection or other source of contamination to the public water supply is found, or it is determined that a backflow prevention assembly is necessary, the city may cease delivery of water to such premises as provided for in section 13.24.060 of this chapter. (Ord. 3525, 2015)

# 13.24.060: ENFORCEMENT AND DAMAGES:

A. In addition to all other lawful measures, the city water superintendent is authorized to disconnect city water system users from the city public water system for violations of this chapter. Except in cases of emergency or where the violation causes an imminent threat to the public water system, the water superintendent will, prior to disconnection, send notice to the property owner by first class mail at the address on record with the county assessor's office at least thirty (30) days prior to disconnection. The notice will explain the violation and the steps necessary to prevent disconnection. The property shall be physically posted with a copy of said thirty (30) day notice and a subsequent five (5) day disconnection notice prior to service termination.

B. An administrative fee, in an amount set by resolution of the city council, will be added to the water bill of each

customer sent a thirty (30) day disconnection notice and the five (5) day disconnection notice for violations of this chapter.

C. Irrigation contractors and others providing irrigation blow out services for hire, will be held liable for all damages incurred by the city as a result of improper connection or introduction of air into the customer's domestic service and/or the city water mains. Damages may include, but not be limited to:

- 1. All labor involved;
- 2. Equipment expenses;
- 3. Repairs or replacement of damaged materials and equipment;
- 4. Volume of water flushed to remove system contamination;
- 5. Water quality treatment and sampling expenses. (Ord. 3525, 2015)