



City of Ketchum

June 13, 2022

Mayor Bradshaw and City Councilors
City of Ketchum
Ketchum, Idaho

Mayor Bradshaw and City Councilors:

Recommendation To Approve changes to Ketchum Municipal Code Title 13, Chapter 13.08, Section 2 (Definitions) and Section 7 (Cross Connections)

Recommendation and Summary

Staff is recommending the council to approve changes to Ketchum City Municipal Code 13.08 Water Service Systems regarding Section 020 (Definitions) pertaining to verbiage used or added in Section 070 (Cross Connection) which will provide clarity for City of Ketchum's rules and regulations of Section 070 Cross Connections and to bring Section 070 Cross Connection into compliance with new Federal and State Regulations.

I recommend the council authorize the mayor to sign Ordinance _#1237_ to bring the City of Ketchum's Water System Municipal Code 13.08 into compliance with Federal and State regulations (IDAPA 58.01.08) pertaining to Section 020 (Definitions) and Section 070 (Cross Connections).

The reasons for the recommendation are as follows:

- **The Idaho Department of Environmental Quality Idaho Administrative Act (IDAPA) rules for public drinking water systems (IDAPA 58.01.08) requires municipalities to adopt and maintain a cross connection program to protect their public water system from contaminants.**
- **Recently the State of Idaho has amended IDAPA 58.01.08 pertaining to cross connections in public drinking water systems. Changes to the municipal code will bring the City of Ketchum into compliance with new regulations.**
- **Updated Ketchum City Municipal Code Section 020 (Definitions) to provide current definitions regarding verbiage used in Section 070 Cross Connection**
- **To provide clarity to the public regarding rules and regulations pertaining to Section 070 Cross Connection within the City of Ketchum's Municipal Code 13.08 Water Service Systems.**

Introduction and History

The City of Ketchum's Municipal Code 13.08 Water Service Systems was passed in 1987. Since then, there have been no amendments of this code since new Federal and State rules and regulations have been amended. The water department would like to bring the City of Ketchum's Municipal Code into compliance with the recent changes to better protect our public water supply.

Attachment: Ketchum City Ordinance # 1237

Respectfully submitted
Gio Tognoni
Water Division Supervisor

ORDINANCE NUMBER 1237

AN ORDINANCE OF THE CITY OF KETCHUM, IDAHO, AMENDING CHAPTER 13.08 OF TITLE 13 KETCHUM MUNICIPAL CODE (KMC) - WATER SERVICE SYSTEM; ADDING AND AMENDING DEFINITIONS IN KMC 13.08.020; ADDING TO AND AMENDING KMC 13.080.070 FOR THE REGULATION OF CROSS-CONNECTIONS INCLUDING AUTHORITY, PURPOSES, REGULATIONS, RESPONSIBILITIES, ENFORCEMENT, AND TESTING; PROVIDING FOR SEVERABILITY; PROVIDING A REPEALER CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF KETCHUM, IDAHO.

Section 1. Chapter 13.08.020 – Definition of Title 13 of Ketchum Municipal Code is amended as follows:

13.08.020 – Definitions. Unless the context specifically indicates otherwise, the meaning of terms in this Ordinance shall be as follows:

~~Backflow The flow, other than the intended direction of flow, of any foreign liquids, gases, or substances into the distribution system of a public water supply.~~

Approved - 1) The term “Approved” as herein used in reference to a water supply shall mean a public water supply that has been approved by the Idaho Department of Environmental Quality. 2) The term “approved” as herein used in reference to an air gap, a double check valve assembly, a reduced principle backflow prevention assembly or other backflow prevention assemblies or methods shall mean approved per Idaho State Plumbing Code 603.

Auxiliary Water Supply – Any water supply, on or available, to the premises or other than the purveyors approved public potable water supply.

Backflow - The undesirable reversal of the flow of water or other liquids, mixtures of water, gases, or other substances, under positive or reduced pressure into the distribution pipes of a potable water supply from any source other than its intended source.

~~Backflow Prevention Device – A device to counteract backpressure or prevent backsiphonage.~~

Backflow Prevention Assembly – A backflow preventer which is designed to be in-line tested and repaired. An “assembly” shall consist of the backflow

prevention unit, two resilient seated shutoff valves and test cocks. Approval of backflow assemblies by the City shall be based on a favorable laboratory and the State of Idaho Drinking Water Regulations. Most commonly categorized as air gap, reduced pressure principle device, double check valve assembly, pressure vacuum breaker, atmospheric vacuum breaker, hose bibb vacuum breaker, residential dual check, double check with intermediate atmospheric vent, and barometric loop.

Backflow Prevention Device – A backflow preventer that is not designed for in-line testing.

Back Pressure – A condition in which the Owner's system pressure is greater than the supplier's system pressure, which would cause reversal of the normal direction of flow.

Back-Siphonage – The flow of water or other liquids, mixtures, or substances into the distribution pipes of a potable water supply system from any source other than its intended source caused by the sudden reduction of pressure in the potable water supply system.

City: The City of Ketchum, Idaho, its authorized or designated agent, representative, or deputy.

City Water Service Line: That portion of an individual water service line that runs from its connection with the public water main to and including the curb stop installed within the limits of the public right of way or recorded utility easement. The meter irrespective of its location shall be owned and maintained by the City.

Commission – The State of Idaho Control Commission.

~~Contamination – The entry into or presence in a public water supply of any substance which may be deleterious to health and/or quality of water.~~

Contamination – An impairment of a potable water supply by the introduction or admission of any foreign substance that degrades the quality and creates a health hazard.

~~Cross-Connection – Any physical arrangement whereby a public water supply is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture, or other device which contains or may contain contaminated water, sewage, or other waste or liquids of unknown or unsafe quality which may be capable of imparting contamination to the public water supply as a result of backflow.~~

Cross Connection - A connection or potential connection between any part

of a potable water system and any other environment containing other substances in a manner that has the potential to allow such substances to enter the potable water system. Other substances may be gases, liquids, or solids, such as chemicals, waste products, steam, water from other sources (potable or non-potable), or any matter that may change the color or add odor to the water.

Department – City of Ketchum/Water Department

Hazard, Degree of – The term is derived from an evaluation of the potential risk to public health and the adverse effects of the hazard upon the potable water system.

A. Hazard: Health – A cross connection or potential cross connection involving any substance that could, if introduced into the potable water supply, cause death or illness, spread disease, or have a high probability of causing such effects.

B. Hazard: Plumbing – A plumbing type cross connection in a customer's potable water system that has not been properly protected by an approved air gap or an approved backflow prevention assembly.

C. Hazard: Pollution – A cross connection or potential cross connection involving any substance that generally would not be a health hazard but would constitute a nuisance or be aesthetically objectionable, if introduced into the potable water supply.

Health Officer The Idaho Department of Health and Welfare, or its authorized agent.

Multiple building Development Includes the various types of developments that would have common or joint ownership areas such as condominiums, townhouses, mobile home parks, office buildings, shopping centers, and similar developments.

Municipal Water System Includes all components and facilities of the public water system that is owned, operated, and maintained by the City of Ketchum, Idaho, for domestic and other uses, which systems and facilities consist generally of all wells, storage reservoirs, transmission mains, structures, buildings, chlorination facilities, pumps, pump houses, distribution mains, water lines, fire hydrants, valves, service connections, fittings, mechanical equipment and all other facilities exclusive of private water service lines as required for the furnishing and distribution of water as a public system to areas of the City.

Owner Refers to the property owner that is served or is to be served by the municipal water system, or his duly authorized agent.

Person Any individual, partnership, firm, company, association, society, public or private corporation, ~~or~~ group, political subdivision or agency of the State Department, agency or instrumentality of the United States or any other legal entity.

Permit – A document issued by the Department which allows the use of a backflow preventer, building permit, etc....

Private Fire Service Connection This is a separate and independent connection from the municipal water main that connects directly to a private sprinkler system or other private system that has been, or is to be installed, in any building for the purpose of fire control withing that specific building and said connection shall be for no other purpose except upon written approval of the Water Superintendent.

Private Water Service Line This is to be the portion of the water service line that runs from the building being served to the point of connection with the City water service line.

Private Water System This is any water system for domestic use that is not owned, operated, and maintained by the City of Ketchum, Idaho.

Pollution – The presence of any foreign substance in water that tends to degrade its quality by does not necessarily pose a risk to human health if consumed.

Property Refers to all property, whether privately or publicly owned, within the service limits of the municipal water system excluding therefrom lands that have been dedicated for public street or highway rights of way.

~~Shall “Shall” is mandatory; “May” is permissive.~~

User Shall be synonymous with “Owner”.

Water Main Any pipeline owned by the City for the purpose of transportation and/or distribution of water to serve more than one water service line or user.

Water, Potable – Water that is deemed safe for human consumption, as determined by the standards set forth by the Department of Environmental Quality and defined in the Idaho Rules for Public Drinking Water Systems, IDAPA 58.01.08.

Water, Non-potable – Water that is not safe for human consumption or that is of questionable quality.

Water, Used – Any water supplied by the City of Ketchum’s water system to a consumer’s water system after it has passed through the point of delivery and is no longer under the sanitary control of Ketchum’s water distribution system.

Water Superintendent The person appointed by the City to be responsible for the operation and maintenance of the municipal water system, or his authorized agent.

Section 2. Chapter 13.08.070 – Cross Connections of Title 13, Ketchum Municipal Code is amended as follows:

13.08.070 – Cross Connections

A. Purpose:

1. To protect the public potable water supply served by the City of Ketchum Water Department from the possibility of contamination or pollution by isolating, within its customers internal distribution system, such contaminants or pollutants which could backflow or backsiphon into the public water system.
2. To promote the elimination or control of existing cross-connections, actual or potential, between its customers in-plant potable water system, and non-potable systems.
3. To provide for the maintenance of a continuing program of cross-connection control which will effectively prevent the contamination or pollution of all potable water systems by cross-connection.

B. Authority:

1. The Federal Safe Drinking Water Act of 1974, and the rules of the State of Idaho IDAPA §58.01.08.
2. City of Ketchum, Rules and Regulations, Ordinances as adopted. The Water Superintendent shall have the authority to require standards more stringent than State regulations if they deem that the conditions so dictate.

C. Responsibility: The City and/or its Department employees shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow or backsiphoning of contaminants or pollutants through the water service connection. City water customers are responsible for aiding the City by installing/maintaining proper protective measures within their individual home plumbing systems. If, in the judgment of the Department, an approved backflow device is required at the City’s water service connection to any customer’s premises, the City, or its delegated employee, shall give notice in writing to said customer to install an approved backflow prevention device at each service connection on the premises. The customer shall, within ninety (90) days install such approved device, or devices, at their own expense, and failure or refusal, or inability on the part of the

customer to install said device or devices within ninety (90) days, shall result in discontinuing water service to the premises until such device or devices have been properly installed and inspected.

D. Administration.

1. The Department will operate a cross-connection control program, to include keeping of necessary records, which fulfill the requirements of the Cross-Connection Regulations and are approved by the controlling agency(s).
2. Persons served by the City Municipal Water System, including, but not limited to Owners, shall comply with all the provisions of the Cross-Connection Control Program.
3. The Owner shall allow his property to be inspected for possible cross-connections and shall follow the provisions of the Department's program and the City Regulations if a cross-connection is permitted.

E. Cross-Connection Rules and Regulations:

No water service connection to any premises shall be installed or continued in use unless the water supply is protected by backflow prevention devices as ~~may be~~ required by this chapter and/or Title 1, Chapter 8, IDAPA §58.01.08 "Idaho Regulations for Public Drinking Water Systems." The installation or maintenance of a cross-connection which will endanger the water quality of the potable water supply of the City shall be unlawful and is prohibited. The control or elimination of cross-connections shall be in accordance with the Ordinance and/or Title 1, Chapter 8 IDAPA §58.01.08 "Idaho Regulations for Public Drinking Water Systems," together with the latest additions of appropriate manuals of standard practice pertaining to cross connection control approved by the Water Superintendent . ~~The Water Superintendent shall have the authority to require standards more stringent than State regulations if he deems that the conditions so dictate.~~ No connection will be made to any fire hydrant on the municipal water system by any person without having first received the permission of the Water Superintendent, except for firefighting purposes. No person shall make or permit the cross-connection of any private water system to a water line that is served by the municipal water system except as herein provided. Whenever an Owner connects to the municipal water system the Owner shall, at ~~this~~ their expense, physically disconnect any private water source from the municipal water source in such a manner that water from a private source will never pass through the same pipes that carry water from the municipal source, except as may be approved by the Water Superintendent ~~and Health Officer.~~

1. Backflow prevention devices shall be installed at the ties on the premises or within any premises where, in the judgement of the Water Department employee (s) and/or Superintendent, the nature and extent of activities, or the materials stored on the premises, would present an immediate and dangerous hazard to health and/or be deleterious to the quality of the water should a cross-connection occur; even though such cross-connection does not exist at the time the backflow prevention devices shall be installed under circumstances, including, but not limited to, the following:

- a. Premises having an auxiliary water supply, unless the quality of the auxiliary supply is in compliance with Title 1, Chapter 8 IDAPA §58.01.08, Idaho Regulations for Public Drinking Water Systems and is acceptable to the Water Superintendent.

[Remainder of sub-subsections unchanged except for numbering as may be required for consistency.]

[Subsections B and C unchanged except for numbering as may be required for consistency.]

~~D. Backflow prevention devices required by this chapter shall be installed under a permit issued by the Water Superintendent and shall not be used until the same is inspected, tested and approved by qualified Water Department personnel. There shall be no charge for the permit, inspection and testing by the Water Department prior to approval of the installation. Thereafter, the owner shall have said backflow prevention device tested by a qualified backflow prevention tester annually except for devices installed as part of irrigation systems which shall be tested in accordance with Subsection 7 (G) hereinbelow. Such testing together with all maintenance and repair of said device shall be at the owner's expense. Whenever a device is found to be not working properly, it shall immediately be repaired or replaced at the owner's expense. All backflow prevention devices shall be tested by a qualified backflow prevention device tester at the owner's expense.~~

[Subsections E and F are unchanged except for numbering as may be required for consistency.]

7. No irrigation system shall be installed without adequate backflow prevention devices at the point from which the water for irrigation is taken from the municipal water system, or at a location approved by the Water Superintendent. Backflow devices installed on irrigation systems shall be tested ~~at least once every three (3) years~~ annually.
8. Failure of the customer to comply with the regulation for installation, maintenance, testing or inspection of backflow prevention devices required by this Ordinance and/or Title 1, Chapter 8 IDAPA §58.01.08 "Idaho Regulations for Public Drinking Water Systems" shall be grounds for the termination of water service to the premises.

F. Requirements:

1. Department:

a. For new installations the Department will provide on-site evaluation and/or inspection of plans to determine the type of backflow preventer, if any, that will be required and perform inspection upon installation.

b. For premises existing prior to the amendment of ordinance, the Water Department will perform inspections and advise Owner of corrections deemed necessary.

c. The Department will not allow any cross-connection to remain unless it is protected by an approved backflow preventer for which an approval has been issued and which will be regularly tested to ensure satisfactory operation.

d. The Department shall inform the Owner by letter, of any failure to comply, by the time of the first re-inspection. The Department will allow an additional fifteen (15) days for the correction. In the event the Owner fails to comply with the necessary correction by the time of the second re-inspection, the Department will inform the Owner by letter that the water service to the Owner's premises will be terminated within a period not to exceed five (5) days. If the Owner informs, in writing, the Department of extenuating circumstances as to why the correction has not been made, a time extension may be granted by the Water Superintendent, but in no case will exceed an additional thirty (30) days.

e. If the Department determines at any time that a serious threat to the public health exists, the water service may be terminated immediately.

f. The Department shall have on file, a list of people who are certified backflow device testers. All charges for these tests shall be paid by the Owner of the building or property.

2. Owner:

a. The Owner shall be ultimately responsible for the elimination or protection of all cross-connections on their premises.

b. The Owner, after having been informed by a letter from the Department, shall at his expense, install, maintain, and test or have tested, all backflow preventers on their premises.

c. The Owner shall correct any malfunction of the backflow preventer which is revealed by periodic testing.

d. The Owner shall inform the Department of any proposed or modified cross-connections and any existing cross-connections of which the Owner is aware but has not been found by the Department.

e. The Owner shall not install a bypass around any backflow preventer unless there is a backflow preventer of the same type on the bypass. Owners who cannot shut down operation for testing of the device must supply additional devices necessary to allow testing to take place.

f. The Owner shall install backflow preventers in a manner approved by the standards set by the manufacturer, the rules of the State of Idaho IDAPA §58.01.08, and Uniform Plumbing Code.

g. The Owner shall install only backflow preventers approved by the Water Department and in compliance with IDAPA §58.01.08.

G. Existing In-Use Backflow Prevention Devices: Any existing backflow preventer shall be allowed by the Department to continue in service unless the degree of hazard is such as to supersede the effectiveness of the present backflow preventer or result in an unreasonable risk to the public health. Where the degree of hazard has increased, as in the case of irrigation systems and residential installations converting to a business establishment, any existing backflow preventer must be upgraded to a reduced pressure principle device, or a reduced pressure principle device must be installed if no backflow device was present or existing backflow device is removed for repairs the Owner shall be responsible to come into compliance with IDAPA 58.01.08.

H. Periodic Testing.

1. Reduce pressure principle backflow devices and double check backflow devices shall be tested annually.

2. Periodic testing shall be performed by any state certified tester. This testing will be done at the Owner's expense.

3. Any backflow preventer that fails during a periodic test shall be repaired or replaced. If backflow preventer must be replaced the Owner must be in compliance with IDAPA 58.01.08 and City regulations. Upon completion of the repair the device shall be re-tested at the Owner's expense to ensure correct operation. High hazard situations will not be allowed to continue unprotected. If the backflow preventer fails to test and cannot be repaired immediately, the water supply will be terminated immediately.

4. Backflow prevention devices will be tested more frequently in cases where there is a history of test failures and the Department determines, the degree of hazard involved, additional testing is warranted. Cost of the additional test will be borne by the Owner.

I. Fees and Charges:

The City of Ketchum may establish by resolution and assess or impose fees or charges for the permits and services required under this chapter.

Section 3. If any section, paragraph, sentence or provision hereof or the application thereof to any particular circumstances shall ever be held invalid or unenforceable, such holding shall not

affect the remainder hereof, which shall continue in full force and effect and applicable to all circumstances to which it may validly apply.

Section 4. All Ordinances or Resolutions or parts thereof in conflict herewith are hereby repealed and rescinded.

Section 5. This Ordinance shall be in full force and effect after its passage, approval and publication according to law.

PASSED AND ADOPTED by the Council of the City of Ketchum this ____ day of _____, 2022.

Neil Bradshaw, Mayor
City of Ketchum

ATTEST:

Tara Fenwick, City Clerk