Exemption Application:
Backflow Prevention Requirements for Small Multifamily Properties

As allowed by the Colorado Department of Public Health and Environment the water purveyor can grant an exemption at the multifamily property named below if it can verify that there is no increased risk from said property to the City of Boulder's distribution system. All commercial properties must comply within the city of Boulder. As multifamily properties fall between "commercial" properties and "single family residences" (which do not typically have to comply), it is up to the water purveyor (City of Boulder) to determine if the multifamily property has hazards that are consistent with a commercial property. Such hazards would require backflow prevention assemblies be installed and tested. If the property does not exhibit these characteristics it may be exempt (at this time). Please review the criteria below.*

To qualify for exempt status the owner must reasonably demonstrate that, unlike most commercial properties, this property does not have any "high hazards" that would require backflow prevention*. For the purposes of this document a high hazard is defined as a specific cross-connection, other plumbing connection, or building feature that represents an increased risk of contamination of the public drinking water supply.

To confirm the property identified below does not have any of these high hazards, please check each of the following that apply. If any of the following cannot be marked, the property may not be eligible for an exemption.

Please confirm that the property at _____ (print address) complies with all the following statements by marking and initialing each applicable box below. This property:

- ☐ **Does not have a hydronic heating or cooling system* with chemical (antifreeze) use** _____
- ☐ **Does not have a dedicated fire line*** _____
- ☐ **Does not have a dedicated irrigation line*** _____
- ☐ **Does not have a private well or utilize or connect to any other auxiliary water source** _____
- ☐ **Does not inject chemicals into the plumbing and/or irrigation system** _____
- ☐ **Does not have any cross-connections* with the sanitary sewer** _____
- ☐ **Does not have a process or make-up* water source connected to the plumbing** _____
- ☐ **Does not have an unprotected* swimming pool or hot-tub** _____
- ☐ **Is not over three (3) stories* in height** _____

***Document-specific helpful definitions are provided on the reverse side.**

I _____(print your name) confirm that I am the owner of this property, or responsible party if the owner is a corporation or partnership, and that I have not misrepresented any of the statements above.

_____ **Customer#**_____ **Account#**_____

Signature **Date** ***(this information can be found on your utility bill)***

Please note: Signing this document confirms that all the statements above are true and that the following is understood: A) backflow prevention is a public health concern and if for any reason codes, regulations or program requirements change at either the city or state level this property may have to comply with backflow prevention program requirements; B) if any of the conditions noted above change at this property it is the owner's responsibility to notify the Backflow Prevention Program and to install and (annually) test any required backflow prevention assemblies; C) if needed, a city representative may inspect and or audit this property to confirm the above information is valid; D) this is not a permanent exemption and is subject to change at the discretion of the water purveyor (the City of Boulder) E) the property must still comply with all plumbing code requirements which may require the presence and/or testing of backflow prevention assemblies.

The city will review this document and send notification in the event that the request for exemption has been denied. Please keep make a copy of this form for your records.

Drinking Water Program / Backflow Prevention Program
5605 N 63rd Street Boulder, CO 80301
Backflow Prevention Program (303) 413-7401
Fax: (303) 530-1137
Email: nobackflow@bouldercolorado.gov

HELPFUL DEFINITIONS:

The following list of definitions may assist in filling out the application for exemption.
An in-depth review of the Backflow Prevention Program can be accessed by going to boulderwater.net, and then click on "Backflow Prevention Program"

Backflow- Backflow is a hydraulic event by which water is pushed or pulled back into the drinking water supply. Backflow can occur anytime there is a water main break, a pump hooked up incorrectly, when hydrants are being used, or anytime there is a pressure fluctuation in the system.

Backflow Prevention- Backflow is prevented by installing backflow prevention assemblies after the water meter and prior to any plumbing branches on all properties where there is an actual or potential hazard. This includes the installation of backflow prevention assemblies (also known as cross-connection control assemblies) on all domestic, dedicated fire lines, or dedicated irrigation lines.

Backflow Prevention Assembly*- A backflow prevention assembly is a brass mechanical device installed on each line entering a property prior to any plumbing branches. Once installed and tested (so it is known to be working) rubber checks and springs inside the assembly will close to prevent backflow. There are three main types of assemblies: Reduced Pressure Assembly (RP), Double Check (DC), and Pressure Vacuum Breaker (PVB).

Cross-Connection- A cross-connection is the actual water line connection through which backflow can occur. Every water line tapped off the main can be considered to be a cross-connection as it can allow contamination if it is not protected. Inside a property there can be numerous internal cross-connections to specific hazards like chemical sources or bacteriological sources. Sometimes cross-connections are made with the sanitary sewer; this typically happens when water heaters or water softeners have drain lines extended into the sanitary sewer instead of allowing space between the drain line and sewer pipe/drain.

Dedicated Line- When discussing fire sprinkler water lines or lawn irrigation water lines we use the term "dedicated" in two ways: 1) the line taps directly off the main water supply and 2) the line branches off of the domestic water line prior to property. In either case the line must be protected by a backflow prevention assembly.

Hydronic Heating or Cooling System- A hydronic heating or cooling is considered as any plumbing system where water is used to heat or cool the home. This is not the same as a water heater which simply heats water for use. Hydronic systems like boilers or heat exchangers circulate heated water throughout a property in order to heat that property; water heaters are excluded from this category. Hydronic systems like chillers or cooling towers use water to cool a home; swamp coolers and misters are excluded from this category.

Process and Make-up Water- These two terms are often interchanged but both refer to water that has been contaminated with chemicals. Process water becomes contaminated during an industrial process, such as photo processing or x-ray development. Make-up water becomes contaminated when it is mixed with chemicals (like antifreeze) for the purpose supplying boilers, cooling towers, solar water heating systems, or other sources of cooling and heating. Typical sources to look for include but are not limited to photo labs, darkrooms, x-ray machines, hydronic heating using boilers (that uses chemicals) or solar water heating systems.

Three (3) Stories- Three stories are assumed to be about (12 feet x 3) 36 feet in height (above ground); because the plumbing generally enters at the top of the basement, basements need not be considered in the overall calculation. Similarly, attic space with no plumbing should be disregarded in any calculations.

Unprotected- Refers to the absence of either a backflow prevention assembly or a proper air gap (a physical separation from where the water is supplied and where it is stored).

* For a list of assemblies, assembly types, and what the city of Boulder is requiring for a specific installation please visit boulderwater.net then under Drinking Water click on the Backflow Prevention Program. A quick reference is available as a downloadable PDF entitled general backflow information.