

# PINON PINES PROPERTY LLC 2018 Drinking Water Quality Report

## For Calendar Year 2017

Public Water System ID: CO0108050

**Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.**

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact JOHN VICTOR at 303-779-6131 with any questions or for public participation opportunities that may affect water quality.

### General Information

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting <http://water.epa.gov/drink/contaminants>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants:** salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

### Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit [www.colorado.gov/cdphe/ccr](http://www.colorado.gov/cdphe/ccr). The report is located under "Guidance: Source Water Assessment Reports". Search the table using 108050, PINON PINES PROPERTY LLC, or by contacting JOHN VICTOR at 303-779-6131. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that **could** occur. It **does not** mean that the contamination **has or will** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

## Our Water Sources

<u>Source</u>	<u>Source Type</u>	<u>Water Type</u>	<u>Potential Source(s) of Contamination</u>
WELL NO 1	Well	Groundwater	<p>Potential sources of contamination in our source water area come from: Septic system discharge and groundwater drawdown through fractured rock substrata, forestry soil infiltration and management practices, agriculture land practices, water storage tank and well casing entry, and road soil infiltration. Nitrate and bacteria testing are required routinely to monitor these potential contaminate indicators.</p> <p>GS Pinon Pines LLC disinfects well water with a chlorine solution system. The infrastructure is locked and often inspected for potential contaminate entry. GS Pinon Pines LLC has implemented a cross-connection program, therefore reducing the potential of back-siphonage contamination.</p>

## Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **Maximum Residual Disinfectant Level (MRDL)** – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Contaminant Level Goal (MCLG)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level Goal (MRDLG)** – The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90<sup>th</sup> Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.

- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.
- **Level 1 Assessment** – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment** – A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

### Detected Contaminants

PINON PINES PROPERTY LLC routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2017 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

**Note:** Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

<b>Disinfectants Sampled in the Distribution System</b>						
<b>TT Requirement:</b> At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <b>OR</b>						
If sample size is less than 40 no more than 1 sample is below 0.2 ppm						
<b>Typical Sources:</b> Water additive used to control microbes						
Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December, 2017	Lowest period percentage of samples meeting TT requirement: 100%	0	1	No	4.0 ppm

<b>Lead and Copper Sampled in the Distribution System</b>								
Contaminant Name	Time Period	90 <sup>th</sup> Percentile	Sample Size	Unit of Measure	90 <sup>th</sup> Percentile AL	Sample Sites Above AL	90 <sup>th</sup> Percentile AL Exceedance	Typical Sources
Copper	09/18/2017 to 09/18/2017	0.1	5	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	09/18/2017 to 09/18/2017	0.5	5	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

**Inorganic Contaminants Sampled at the Entry Point to the Distribution System**

<b>Contaminant Name</b>	<b>Year</b>	<b>Average</b>	<b>Range Low – High</b>	<b>Sample Size</b>	<b>Unit of Measure</b>	<b>MCL</b>	<b>MCLG</b>	<b>MCL Violation</b>	<b>Typical Sources</b>
Barium	2016	0.02	0.02 to 0.02	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2016	2	2 to 2	1	ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2016	0.14	0.14 to 0.14	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2017	2	2 to 2	1	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

**Secondary Contaminants\*\***

\*\*Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2016	8.4	8.4 to 8.4	1	ppm	N/A

**Unregulated Contaminants\*\*\***

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Third Unregulated Contaminant Monitoring Rule (UCMR3). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (<http://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod>) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR3 sampling and the corresponding analytical results are provided below.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
UCMR3, cryptosporidium, and radon – NOT SAMPLED					

\*\*\*More information about the contaminants that were included in UCMR3 monitoring can be found at: <http://www.drinktap.org/water-info/whats-in-my-water/unregulated-contaminant-monitoring-rule.aspx>. Learn more about the EPA UCMR at: <http://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule> or contact the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/contact.cfm>.

**Violations, Significant Deficiencies, Backflow/Cross-Connection, and Formal Enforcement Actions**

Violations					
Name	Category	Time Period	Health Effects	Compliance Value	TT Level or MCL
CROSS CONNECTION RULE	FAILURE TO MEET CROSS CONNECTION/BACKFLOW REQUIREMENTS - NON-HEALTH-BASED	02/04/2016 - Open	N/A	N/A	N/A
Additional Violation Information					
<p>*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*</p> <p>Explanation of the violation(s), the steps taken to resolve them, and the anticipated resolved date:</p> <p>Updated Cross Connection Plan (approved by CDPHE on 5/14/18) and Letter attached to this 2017 CCR, which should remedy the violation.</p>					

GS Pinon Pines LLC, Buena Vista, Colorado

IMPORTANT, ACTION REQUIRED

May 16, 2018

Dear Water System Customer,

Greetings from your water system management. The purpose of this letter is to make you all aware of a requirement imposed on every water system throughout the State. According to the Colorado Primary Drinking Water Regulations (CPDWR) Article 12, GS Pinon Pines LLC, as a Community Water System must develop and implement a "Cross Connection Control Plan". The purpose of this program is to protect public health by protecting the integrity of our water system from "Backflow events". Throughout modern history there have been many backflow events leading to major outbreaks of illness and even death. The science behind such events is pretty simple to understand.

Let's take, for example, a mop sink with a hose leading into a mop bucket full of floor cleaning chemicals and water, or a weed sprayer full of poison (Cross Connection). At the same time, the water system has a drop in psi, either from a pipe break, extreme pressure loss, or the well pumping is disrupted. Suddenly, the water throughout the distribution system is being pulled towards the cause of the pressure loss. This back-siphonage can (and does) very easily pull the water directly out of the mop bucket and into the potable water lines, which is then consumed by the public. An unprotected irrigation system or a small wading pool for kids can also back flow in the event of a pressure loss, thus contaminating the water distribution system. It is very easy to understand why this is such a dramatic concern.

Therefore, the water system is Statutorily Required to identify cross connections throughout the Park and make sure that proper Backflow Prevention Devices are installed and in good working order. Such devices are to be inspected by a certified Cross Connection Control Technician upon installation and once per year after that.

We have developed a Cross Connection Control Plan, and it can be viewed with this year's Consumer Confidence Report at our website: <http://gscommunities.biz/pinon-pines-mobile-home-community/>. Additionally, copies of the Cross Connection Control Plan and Consumer Confidence Report are available with our manager, Beth Carnell.

**How You Can Help:**

Please send a note to Beth Carnell, 29600 C. R. 353, Lot 57, Buena Vista, CO 81211 indicating if you have an irrigation sprinkler system, mop sink, hot water boiler or any other connection that leads to any substance other than potable water. We can work with you to have a proper backflow prevention device installed. Please also let Beth know if you currently have a backflow prevention device in place.

Please feel free to contact me with any questions.

Sincerely,  
John Victor  
Water Administrator  
1-303-779-6131

More info can be found at  
<http://www.cdphe.state.co.us/wq/drinkingwater/ManagerialTools.html>

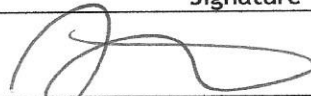
# Backflow Prevention and Cross-connection Control

## GS Pinon Pines, LLC BPCCC Program

### Purpose

This Backflow Prevention and Cross-connection Control Program outlines how the supplier of water specified below will implement its written BPCCC program and achieve compliance with Regulation 11.

Other potentially applicable backflow prevention and cross-connection control requirements are specified in Article 1-114 and Article 1-114.1 of Title 25 of the Colorado Revised Statutes and in the Colorado Plumbing Code. The Department has developed [Safe Drinking Water Program Policy 7](#) to assist public water systems achieve compliance with Regulation 11.

Public Water System Name & PWSID:	GS Pinon Pines LLC PWSID# Co0108050	
Public Water System Owner:	GS Mobile Home Communities Highline Inc.	
BPCCC Administrative Contact:	John Victor	
Address:	2100 E. Colfax	
	Denver, co. 80206	
Email:	john@gscommunities.biz	
Phone:	1-303-779-6131	
Signatures of Owner or Administrative Contact:		
Effective Date	Name	Signature
5/16/18	John Victor	

This water system is comprised of 57 single family mobile homes with a well pumping system for potable water. The system has no storage tanks except for a series of 5- 120gal psi tanks.

Single-family-residential connections pose a relatively low risk to the distribution system based on the volume of water contained in the plumbing system. Local plumbing codes, which are enforced by the local jurisdiction having authority over plumbing within residential structures, are in place to protect private residences from typical residential cross connections. If the local jurisdiction having authority requires that a backflow prevention assembly or backflow prevention method be installed, it is generally the responsibility of the homeowner to maintain the assembly or method.

For single-family residential connections There are types of cross connections at single-family-residential connections that may pose a greater risk than those addressed by local plumbing codes enforced by the local jurisdiction authority. These include but are not limited to: i. Dedicated irrigation lines (from the water main); ii. Dedicated fire suppression system lines and chemically enhanced fire suppression systems; iii. Multi-purpose fire suppression systems are not required to be



controlled where each branch of the suppression system terminates at a regularly used fixture; iv. Auxiliary water sources (e.g. wells, ponds, lagoons, irrigation ditches), hot tubs or swimming pools piped with permanent plumbing, reclaimed water systems, gray-water systems, or onsite water storage tanks with permanent plumbing; and v. Connections to a home's potable water supply system from home business and hobbies including but not limited to agricultural commerce and hydroponic systems, doctor's offices, photo laboratories, hide tanning operations, and metal plating operations.

\*\*\*\*This program must be kept on file for review by the Department. It can be revised by the Department as necessary.

## Backflow Prevention and Cross-connection Control Program

### (i) Process for conducting surveys.

Mail out or hand delivery the questionnaire survey to each mobile home owner or renter on premises. The ORC will review the results and schedule further inspection and identify possible device .
Since this system consists of only single family residences a onsite survey / inspection will not be performed.

### (ii) Process to select a backflow prevention assembly or backflow prevention method to control a cross connection.

Determine if a cross connection exists from the survey or inspections and the device required for the degree of hazard. Additionally, the supplier would select an assembly and/or method from approved CDPHE regulations and/or guidelines, as applicable.

### (iii) Legal authorities to install, maintain, test, and inspect backflow prevention assemblies and/or backflow prevention methods and/or require customers to install, maintain, test, and inspect backflow prevention assemblies and/or backflow prevention methods.

<input type="checkbox"/> Ordinance (attach copy) <input type="checkbox"/> User Agreements (attach copy) <input checked="" type="checkbox"/> Other - explain below
---

The supplier performs the actions necessary to complete the indicated requirement(s) in the regulation. 1. If the supplier does not have a legally-enforceable mechanism in place, the Department expects the supplier to perform the actions necessary to complete the indicated requirements in the regulation. The legal authority to install, maintain, test, and inspect backflow prevention assemblies and/or methods is derived from Pinon Pines Mobile Home Park Leases and Rules and Regulations signed by the residents.


(iv) Process to track the installation, maintenance, testing, and inspection of all backflow prevention assemblies and backflow prevention methods used to control cross connections.

The administration will keep a spread sheet of all devices , addresses, contact info , installation dates, testing, and maintenance


(v) The process the supplier will use to ensure backflow prevention assemblies are tested by a Certified Cross-Connection Control Technician.

The residences with devices will be required to have yearly inspections by a Certified Technician.


## Backflow Prevention and Cross-connection Control Program

### Department Notification

If we become aware of a suspected or confirmed backflow contamination event, the supplier must notify and consult with the Department on any appropriate corrective measures no later than 24 hours after learning of the backflow contamination event. The notification should be made to the 24-hour Environmental Release and Incident Report Hotline at 1-877-518-5608.

When reporting the event, please have available the as much of the following information as possible:

- Date and time of event;
- Location of event;
- Type of threat or event;
- Public Water System Name and Identification Number;
- Water supplier contact name and phone number;
- Method of discovery (consumer complaint, witness, perpetrator, employee report);
- Response actions taken (water quality parameter testing, isolation of affected water);
- Recovery actions taken;
- Notifications made (customers, law enforcement, news media, etc.);
- Assessment of threat, if possible.

Regulation 11.39(7) requires that we notify the Department within 48 hours in any instance the supplier becomes aware of any backflow prevention and cross-connection control violation and any backflow prevention and cross-connection control treatment technique violation specified in Regulation 11.39(6).

Such notifications to the Department can be written, verbal, or made by other means. The Department can be notified via telephone at 303.692.2000 and contacting the Department's Water Quality Control Division's backflow prevention and cross connection control specialist. The Department can also be notified via email at [cdphe.wqenginfo@state.co.us](mailto:cdphe.wqenginfo@state.co.us) sent to the attention of the backflow prevention and cross-connection control specialist.

#### Public Notice Requirements

Regulation 11.39(7) requires that suppliers distribute Tier 2 public notice as specified in Regulation 11.33 in any instance the supplier becomes aware of any backflow prevention and cross-connection control treatment technique violation.

Regulation 11.39(7) requires that suppliers distribute Tier 3 public notice as specified in Regulation 11.33 a in any instance the supplier becomes aware of any backflow prevention and cross-connection control violation.

Please contact your Department assigned compliance officer with any questions regarding to public notice.

## Backflow Prevention and Cross-connection Control Program

### (i) Survey Process and Documentation

Single-family means:

- A single dwelling which is occupied by a single family and is supplied by a separate service line;
- A single dwelling comprised of multiple living units where each living unit is supplied by a separate service line.
- If a water supplier has ownership and maintenance responsibilities of a service line up to a point of single-connections such connections may be considered a single-family-residential-

connection even if this connection is to a multi-family dwelling unit. It is important to be aware that all other applicable parts of Regulation 11 will also apply to those new acquired waterworks (i.e. distribution system) and that any irrigation or other cross connections that are directly connected to the newly acquired service line would have to be controlled in accordance with Regulation 11.39.

The supplier must survey any waterworks and the water supply systems associated with those facilities for cross connections.

If the supplier uses questionnaires, various methods may be used to distribute the questionnaires: email surveys, web-based surveys, written surveys, or telephone surveys. Questionnaires should provide examples of common cross connections to the customer who completes the survey. Questionnaires should ask that the property-owner indicate that the information is accurate to the best of their knowledge.

It is important that newly constructed and renovated buildings are constructed in accordance with the local plumbing code. The code is intended to protect the internal potable water system and its occupants from contamination that can be introduced via restrooms, kitchens, boilers, irrigation, HVAC systems, etc. It is equally important that the water supplier protect their distribution system from contamination that can be introduced via car washes, auxiliary water sources, fire suppression systems, irrigation and many other sources. Water suppliers need to perform cross connection identification surveys to identify potential cross connections within their distribution system.

\*\*\*Note to supplier. Describe in this section how the supplier complies with the regulation and its survey requirements

(ii & iv)            Legal Authority

The supplier does not have a legally-enforceable mechanism in place, the Department expects the supplier to perform the actions necessary to complete the indicated requirements in the regulation.

As a reminder suppliers are prohibited from installing or permitting any uncontrolled cross connection to the distribution system or within the supplier's waterworks.

- Installing an uncontrolled cross connection means modifications or additions to waterworks or water supply systems that create a cross connection. The supplier is prohibited from intentionally performing any actions which would result in the creation of a cross connection.
- Permitting an uncontrolled cross connection in the context of Regulation 11.39 means the supplier has allowed their users or customers to continue to have an uncontrolled cross connection past the regulatory-defined timelines. If the regulatory-defined timelines have elapsed and the supplier has not taken any of following actions; control the cross connection, remove the cross connection or suspends service to the identified connection\*\*\*, then the supplier is allowing, or permitting, the cross connection to exist and is in violation of Regulation 11.

\*\*\* Note to supplier. Before suspension of service can be considered appropriate action the Department expects that the supplier will confirm the following:

- The connection downstream of the valve used to suspend the service does not remain pressurized because the customer has access to an alternative source of water or a storage tank onsite
- If the cross connection is to a fire suppression system; suspension of service would not result in the building being inadequately protected from loss of life through fire. If there are service connections at the property separate from the fire suppression system causing the cross

connection, a supplier may suspend service to one or all of those other service lines (e.g. domestic or irrigation) as an appropriate action.

- The supplier may receive a Department approved alternative compliance schedule for identified cross connections that have not been controlled within 120 days. Department approval of an alternative compliance schedule means either an email or other written communication from the Department. The Department has provided in [APPENDIX C - BPCCC Rule 120-Day Cross-connection Control Extension Application](#) for such request.
- Suppliers must specify the process that the water system will use to require the installation, maintenance, testing, and inspection of all backflow prevention assemblies and backflow prevention methods used to control cross connections. Generally, this is specified in one of the following: local government ordinances, user agreements or the public water system assumes full responsibility.

(iii) Identification of Cross Connections and Backflow Prevention Assembly or Backflow Prevention Method Selection

If the supplier discovers an uncontrolled cross connection and believes that a backflow contamination event has not occurred, the supplier must: first determine the type of backflow prevention assembly or backflow prevention method needed to control the cross connection and second install and maintain or require the customer to install and maintain a backflow prevention assembly or backflow prevention method at the uncontrolled cross connection, suspend service to the customer, or remove the cross connection, no later than 120 days after its discovery.

\*\*\*Note to supplier. Suppliers should include in the written BPCCC program guidelines and criteria used to select the type of backflow prevention assembly or method used to control an identified cross connection. Guidelines and criteria should address examples of cross connections throughout the water systems distribution system along with the corresponding appropriate backflow prevention assembly and or backflow prevention method used to control the identified cross connection. Part 4.3 of SDWP [Policy 7](#) provides various examples of backflow prevention assemblies and methods and when the use of such assemblies and methods may be appropriate.

(v & vi) Tracking & Certified Tester Verification

Suppliers must specify the tracking mechanism it will use to verify the installation, maintenance, testing, and inspection of all backflow prevention assemblies and backflow prevention methods used to control cross connections. This section may include the process the supplier will use to ensure backflow prevention assemblies are tested by a Certified Cross-Connection Control Technician

\*\*\*Note to supplier. Please provide a tracking spreadsheet or description of program or other method which the supplier is using to verify performance and compliance with Regulation 11.

- i. To be considered adequate, test reports used to document compliance with Regulation 11 must include all of the following:

Assembly or method information:

- a. Assembly or method type;
- b. Assembly or method location;
- c. Assembly make, model and serial number;
- d. Assembly size;
- e. Test date; and,
- f. Test result (pass/fail).

Certified Cross-Connection Control Technician information:

- a. Certified Cross-Connection Control Technician certification agency;

- b. Certification number;
- c. Certification expiration date or statement that certification is current;
- d. As an alternative to a-c, suppliers may provide documentation of an alternative validation process such as electronic login to reporting software where only current, certified cross-connection control technicians (or their companies) are given a login.

#### Definitions

1. "Air gap separation" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture or other device and the overflow level rim of the receptacle and should be at least double the diameter of the supply pipe measured vertically above the flood level of the rim of the vessel, but in no case, less than one inch.
2. "Auxiliary water supply" means any water source or system, other than the public water supply, that may be available in the building or premises.
3. "Backflow" means the flow of water other than the intended direction of flow, of any foreign liquids, gasses or substances into the distribution system of any public water supply.
4. "Backflow prevention assembly" means any double check valve, vacuum breaker, or reduced pressure principle backflow preventer having resilient-seat shut-off valves on both the upstream and downstream end of the device and the necessary test-cocks as integral parts of the assembly.
5. "Consumer" means the owner or person in control of any premises supplied by, or in any manner connected to a public water system.
6. "Containment" means the protection of the public water supply by installing a backflow prevention assembly or air-gap separation on the main service line to a facility.
7. "Contamination" means the impairment of the quality of water by sewage, process fluids or any other substance to a degree which could create an actual hazard to public health through poisoning, or through the spread of disease by means of exposure.
8. "Cross connection" means any physical link between a potable water supply due to the reversal of flow of the water in the piping or water distribution system.
9. "Hazard, degree of" means an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.
  - A) Hazard, Health- any condition, device or practice in the water supply system and its operation which could create or may create a danger to the health and well-being of the water system consumers.
  - B) Hazard, Plumbing- a physical plumbing type cross connection in a consumer's potable water system that has not been properly protected by a vacuum breaker, air gap separation or backflow prevention assembly.
  - C) Hazard, Pollutional- an actual or potential threat to the physical properties of the water system components or to the potability of the public or the consumer's potable water system, but which would constitute a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances, but may not be dangerous to human health.
  - D) Hazard, System- an actual or potential threat of severe damage to the physical properties of the public's potable water system or the consumer's potable water system, or of a pollution or contamination which would have a protracted effect on the quality of the potable water within the system.
10. "Industrial Process System" means any system containing a fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollutional or plumbing hazard if introduced to a potable water supply.
- 11). "Isolation" means the protection of a facility's internal plumbing system by the creation of an air gap separation, the installation of a backflow prevention assembly device on any individual fixture, appurtenance or system.
12. "Pollution" means the presence of any foreign substance (organic, inorganic or biological) in water which degrades its quality so as to constitute a hazard or otherwise impair the usefulness of the water to a degree which creates an actual hazard to the public health.

13. "Public potable water system" means any publicly or privately owned water system supplying water to the general public which is satisfactory for drinking, culinary and domestic purposes and meets all of the requirements of the Colorado Department of Public Health and Environment.

14. "Service connection" means the terminal end of a service line from the public water system. If a meter is installed at the end of the service, then the service connection means the downstream end of the meter.

15. "Water System Operator" means the individual on record with the Colorado Department of Public Health and Environment as the water system "ORC" (Operator in Responsible Charge) with the full-backing of the owners of the water system to make all operational decisions with regard to the integrity of the water system.