

41-00186

CHRISTMAS VALLEY WATER DISTRICT

CROSS CONNECTION CONTROL ENFORCEMENT DOCUMENT

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**Cross Connection
Drinking Water Program**

Pursuant to Chapter 333, Division 61, of the Oregon Administrative Rules, it is the responsibility of the Christmas Valley Water District to protect the public water from pollution and contamination by instituting and enforcing a cross connection control program.

1:01 PURPOSE

The purpose of this enforcement document is to protect the water supply and distribution system of the Christmas Valley Water District from contamination or pollution due to any existing or potential cross connections and to comply with the Oregon Administrative Rule Chapter 333-061-0070, 0071, 0072, 0073 and 0074 or as amended.

1:02 DEFINITIONS

For the purposes of this enforcement document, the following definitions shall apply unless the context clearly indicates or requires a different meaning. If a word or term used in this enforcement document is not contained in the following list, its definition, or other technical terms used, shall have the meanings or definitions listed in the Oregon Administrative Rules, Chapter 333, or the most recent edition of the *Manual of Cross Connection Control* published by the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California ("USC").

- (1) "APPROVED BACKFLOW PREVENTION ASSEMBLY" or "BACKFLOW ASSEMBLY" or "ASSEMBLY" means an assembly to counteract backpressure and/or prevent back-siphonage. This assembly must appear on the list of approved assemblies recognized by the Oregon Health Authority.
- (2) "AUXILIARY SUPPLY" means any water source or system other than the water source or system of Christmas Valley Water District.
- (3) "BACKFLOW" means the flow in the direction opposite to the normal flow or the introduction of any foreign liquids, gases, or substances into the water system of the Christmas Valley Water District.
- (4) "CERTIFIED BACKFLOW ASSEMBLY TESTER" means a person who has successfully completed and maintains all requirements as established by the Oregon Health Authority to be a Backflow Assembly Tester in the state of Oregon.
- (5) "CERTIFIED CROSS CONNECTION SPECIALIST" or "CCS" shall mean a person who has successfully completed and maintains all requirements as established by the Oregon Health Authority to be a Cross Connection Specialist in the state of Oregon.
- (6) "CONTAMINATION" means the entry into or presence in a public water supply system of any substance which may be deleterious to health and/or quality of the water.

- (7) "CROSS CONNECTION" means any physical arrangement where a potable water supply is connected, directly or indirectly, with any other non-drinkable water system or auxiliary system, sewer, drain conduit, swimming pool, storage reservoir, plumbing fixture, swamp coolers or any other device which contains, or may contain, contaminated water, sewage or other liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water system as a result of backflow. Bypass arrangements, jumper connections, removable sections, swivel or changeover devices or other temporary or permanent devices through which or because of which backflow may occur, are considered to be cross connections.
- (8) "DEGREE OF HAZARD" means the NON-HEALTH HAZARD or HEALTH HAZARD classification that shall be assigned to all actual or potential cross connections.
- (9) "DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY", "DOUBLE CHECK ASSEMBLY", "DOUBLE CHECK" or "DCVA" means an assembly which consists of two (2) independently-operating check valves which are spring-loaded or weighted. The assembly comes complete with a resilient seated shut-off valve on each side of the checks, as well as test cocks to test the checks for tightness.
- (10) "HEALTH HAZARD" means an actual or potential threat of contamination of a physical, chemical or biological nature to the public potable water system or the consumer's potable water system that would be a danger to public health.
- (11) "IN-PREMISES PROTECTION" means the appropriate backflow prevention within the consumer's water system at or near the point at which the actual or potential cross connection exists.
- (12) "MOBILE UNITS" means units that are temporary in nature, connecting to the water system through a legally-permitted hydrant, hosebib, or other appurtenance of a permanent nature that is part of the Christmas Valley Water District or a permanent water service to a premises. Examples can include but are not limited to the following: water trucks, pesticide applicator vehicles, chemical mixing units or tanks, waste hauler's trucks or units, sewer cleaning equipment, carpet or steam cleaning equipment other than homeowner use, rock quarry or asphalt/concrete batch plants or any other mobile equipment or vessel that poses a threat of backflow in the Christmas Valley Water District. Uses that are excluded from this definition are recreational vehicles at assigned sites or parked in accordance with other Christmas Valley Water District policies pertaining to recreational vehicles and homeowner devices that are used by the property owner in accordance with other provisions of this, or other, Christmas Valley Water District policies pertaining to provision of water service to a premises.
- (13) "NON-HEALTH HAZARD" means the classification assigned to an actual or potential cross connection that could allow a substance that may be objectionable, but not hazardous to one's health, to backflow into the potable water supply.
- (14) "OHA" means Oregon Health Authority.

- (15) "OAR" means Oregon Administrative Rule.
- (16) "PERSON(S)" means a natural person (individual), corporation, company, city, partnership, firm, limited liability company, joint venture company or city, and other such entity.
- (17) "PREMISES" means any piece of property to which water service is provided, including, but not limited to, all improvements, mobile structures and other structures located upon it.
- (18) "PREMISES ISOLATION" means the appropriate backflow prevention at the service connection between the public water system and the premises. This location will be at or near the property line and downstream from the service connection meter.
- (19) "REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY" or "REDUCED PRESSURE PRINCIPLE ASSEMBLY" or "RP ASSEMBLY" means an assembly containing two independently-acting approved check valves together with a hydraulically-operated, mechanically-independent pressure differential relief valve located between the check valves, and at the same time, below the first check valve. The assembly shall include properly located test cocks and two tightly closing shut-off valves.
- (20) "RESIDENT" means a person or persons living within the area(s) served by the Christmas Valley Water District.
- (21) "RETROFITTING" means to furnish a service connection with parts or equipment made available after the time of construction or assembly installation.
- (22) "SOP MANUAL" means the Christmas Valley Water District's Standard Operating Procedures Manual.
- (23) "SYSTEM" refers to and means the water system of Christmas Valley Water District, which shall include, wells, treatment mechanisms or processes, pumping stations, reservoirs, supply trunk or feeder lines, service lines, meters and all other appurtenances, device lines and items necessary to the operation of the system and to supply water service to individual property or premises and shall include the Christmas Valley Water District potable water with which the system is supplied.
- (24) "THERMAL EXPANSION" means the pressure created by the expansion of heated water.

1:03 APPLICATION AND RESPONSIBILITIES

This enforcement document applies throughout the Christmas Valley Water District and to every premises and property served by the Christmas Valley Water District. It applies to all premises, regardless of date of connection to the Christmas Valley Water District. Every owner, occupant or person in control of any concerned premises is responsible for the terms and provisions contained in this enforcement document.

1:04 CROSS CONNECTIONS REGULATED

- (1) No cross connections shall be created, installed, used or maintained within the area(s) served by the Christmas Valley Water District, except in accordance with this enforcement document.
- (2) The CCS shall carry out or cause surveys to be carried out to determine if any actual or potential cross connection exists. If found necessary, an assembly commensurate with the degree of hazard will be required at the service connection.
- (3) The owner, occupant or person in control of any given premises is responsible for all cross connection control within the premises.
- (4) All premises found on Table 48 of the OAR shall install a Reduced Pressure Backflow Assembly at the service connection in accordance with this enforcement document.
- (5) It is the responsibility of the property owner/occupant to purchase, install, test, repair and maintain all backflow assemblies.
- (6) If there is a change in ownership of any and all property within the System's service area, it shall be the responsibility of the new owner to determine that all assemblies are in compliance with this enforcement document.
- (7) The use of any type of chemical spray attachment connected to the premises plumbing, including garden hose fertilizers and pesticide applicators, is not allowed within the Christmas Valley Water District without proper protection from the potential of backflow occurring.
- (8) The use of any type of radiator flush kits attached to the premises plumbing is not allowed within the Christmas Valley Water District without proper protection from backflow occurring.

1:05 BACKFLOW PREVENTION ASSEMBLY REQUIREMENTS

A CCS employed by or under contract with the Christmas Valley Water District, shall determine the type of backflow assemblies to be installed within the Christmas Valley Water District. All assemblies shall be installed at the service connection unless it is determined by the CCS and approved by the Supervisor that in-premises protection would be adequate. An approved

assembly shall be required in each of the following circumstances, but the CCS is in no way limited to the following circumstances:

- (1) In the case of any premises where there is any material dangerous to health which is handled in such a fashion as to permit entry into potable water system, the potable water system shall be protected by an approved air gap separation or an approved reduced pressure principle backflow prevention assembly.
- (2) When the nature and extent of any activity at a premises, or the materials used in connection with any activity at premises, or materials stored at a premises, could contaminate or pollute the potable water supply.
- (3) When a premises has one (1) or more cross connections, as that term is defined in Section 1:02.
- (4) When internal cross connections are present that are not correctable.
- (5) When intricate plumbing arrangements are present making it impractical to ascertain whether cross connections exist.
- (6) When the premises has a repeated history of cross connections being established or re-established.
- (7) When entry to the premises is restricted so that surveys for cross connections cannot be made with sufficient frequency to assure cross connections do not exist.
- (8) When materials are being used such that, if backflow should occur, a health hazard could result.
- (9) When an appropriate cross connection survey report form has not been filed with the Christmas Valley Water District.
- (10) If an in-premises assembly that provides protection of the public water system has not been tested or repaired as required by this enforcement document, the installation of a reduced pressure principle assembly will be required at the service connection.
- (11) There is piping or equipment for conveying liquids other than potable Christmas Valley Water District water and that piping or other equipment is under pressure and installed and operated in a manner that could cause a cross connection.
- (12) When installation of an approved backflow prevention assembly is deemed by a CCS to be necessary to accomplish the purpose of this enforcement document.
- (13) Wherever reclaimed water or separate irrigation water is used on premises.
- (14) When there is a premises with an auxiliary water supply which is interconnected to the supply received from Christmas Valley Water District.

1:06 NEW CONSTRUCTION

- (1) On all new non-residential construction, an approved backflow assembly shall be installed at the service connection. The type of the assembly will be commensurate with the degree of hazard as determined by a CCS.
- (2) When a building is constructed on commercial premises, and the end use of the building is not determined or could change, a reduced pressure principle backflow prevention assembly shall be installed at the service connection to provide protection of the public water supply in the event of the most hazardous use of the building.

1:07 RETROFITTING

Retrofitting shall be required at all service connections where an actual or potential cross connection exists, and wherever else the Christmas Valley Water District deems retrofitting necessary to comply with the OAR, this enforcement document and the District's SOP Manual.

1:08 IRRIGATION SYSTEMS

All irrigation systems shall be protected according to the Uniform Plumbing Code.

1:09 THERMAL EXPANSION

If a closed system has been created by the installation of a backflow prevention assembly, or other appurtenances, it is the responsibility of the property owner, the occupant, or person in control of the property to eliminate the possibility of damage from thermal expansion in accordance with the Plumbing Code.

1:10 MOBILE UNITS

Any mobile unit or apparatus, as defined in Section 1:02 of this enforcement document, which uses the water from any premises within the Christmas Valley Water District, shall first obtain a permit from the Christmas Valley Water District and be inspected to assure an approved air gap or reduced pressure principle assembly is installed on the unit.

1:11 INSTALLATION REQUIREMENTS

All backflow prevention assembly installations shall follow the requirements as stipulated by this document, Christmas Valley Water District's SOP manual and the most recent OAR Chapter 333-061-0071.

If the premises isolation assembly is allowed to be installed at an alternate location, the Christmas Valley Water District must have access to the assembly. No connections can be made between the meter and the backflow assembly.

The type of backflow prevention assembly required shall be commensurate with the degree of hazard that exists and must, at all times, meet the standards of the Oregon Health Authority. All backflow prevention assemblies required under this section shall be of a type and model approved by the OHA.

1:12 PRESSURE LOSS

Any decrease in water pressure caused by the installation of a backflow assembly shall not be the responsibility of the Christmas Valley Water District.

1:13 TEMPORARY METERS AND HYDRANT VALVES

Backflow protection will be required on all temporary meters and hydrant valves before any use. The type of assembly will be commensurate with the degree of hazard and will be determined on a case-by-case basis by a CCS.

1:14 PLUMBING CODE

As a condition of water service, customers shall install, maintain, and operate their piping and plumbing systems in accordance with the current Uniform Plumbing Code, or as amended. If there is a conflict between this enforcement document and the Plumbing Code, the more stringent supercedes.

1:15 RIGHT-OF-WAY ENCROACHMENT

All backflow assemblies must be installed in accordance with the Right-of-Way Encroachment stipulated by the District's "Utility Easement" Document.

1:16 ACCESS TO PREMISES

Authorized personnel of the Christmas Valley Water District, with proper identification and sufficient notice, shall have access during reasonable hours to all parts of a premises and within the structure to which water is supplied. However, if any owner, occupant or person in control refuses authorized personnel access to a premises, or to the interior of a structure, during these hours for inspection, a reduced pressure principle assembly must be installed at the service connection to that premises.

1:17 ANNUAL TESTING AND REPAIRS

All backflow prevention assemblies relied upon to protect the public water system shall be tested immediately upon installation, and at least annually thereafter by an OHA certified backflow assembly tester. All such assemblies found not functioning properly shall be promptly repaired or replaced at the expense of the owner, occupant or person in control of the premises. In the event an assembly is moved, repaired or replaced it must be retested immediately.

All repairs on backflow assemblies within the Christmas Valley Water District service area must be performed according to all State and County regulations.

1:18 MAINTENANCE OF ASSEMBLIES

Backflow prevention assemblies shall be maintained, tested and repaired in accordance with the requirements set out in this enforcement document, the District's SOP Manual, the OAR and all applicable State agency regulations. The assembly owner is responsible for protecting their assembly from freezing and vandalism.

In the event an assembly is not properly tested and repaired, the Christmas Valley Water District will have the assembly tested and repaired and apply all costs associated with this to the assembly owner's utility bill.

1:19 RESPONSIBILITIES OF BACKFLOW ASSEMBLY TESTERS

- (1) All backflow assembly testers operating within the Christmas Valley Water District service area shall be certified in accordance with all applicable regulations of the OHA and must abide by the requirements of this enforcement document and the District's SOP Manual.
- (2) Persons certified as backflow assembly testers shall agree to abide by all requirements of the United States Occupational Safety and Health Administration ("OSHA") and Oregon Occupational Safety and Health Administration ("OR-OSHA").

- (3) It is the responsibility of backflow assembly testers to submit records of all backflow assembly test reports to the Christmas Valley Water District within 10 days of completing the test.

1:20 COSTS OF COMPLIANCE

All costs associated with purchase, installation, surveys, testing, replacement, maintenance, parts and repairs of the backflow prevention assembly, and all costs associated with enforcement of this document, are the financial responsibility of the property owner, occupant, or other person in control of the premises.

1:21 RECOVERY OF COSTS

Any water customer violating any of the provisions of this enforcement document and who causes damage to or impairs the Christmas Valley Water District, including, but not limited to, allowing contamination, pollution, any other solution or used water to enter the Christmas Valley Water District, shall be liable to the Christmas Valley Water District for any expense, loss or damage caused by such violation. The Christmas Valley Water District shall collect from the violator the cost incurred by the Christmas Valley Water District for any cleaning, purifying, repair or replacement work or any other expenses caused by the violation. Refusal to pay the assessed costs shall constitute a violation of this enforcement document and shall result in the termination of service.

All cost associated with any disconnect or reconnect fees resulting from the enforcement of this enforcement document are the sole responsibility of the property owner.

1:22 TERMINATION OF SERVICE

Failure on the part of any owner, occupant or person in control of the premises to install a required assembly, have it tested a minimum of annually and repaired if necessary, and/or to discontinue the use of all cross connections and to physically separate cross connections in accordance with this enforcement document is sufficient cause for the discontinuance of public water service to the premises pursuant to Oregon Administrative Rule chapter 333-061-0070, or as amended. In the case of an extreme emergency or where an immediate threat to life or public health is found to exist, discontinuance or termination of public water service to the premises shall be immediate.

In lieu of termination of service, the Christmas Valley Water District may, at the property owner's expense, install a reduced pressure backflow assembly at the meter. Testing, maintenance and repair of the assembly shall be the responsibility of the property owner.

1:23 FALSIFYING INFORMATION

Any person who knowingly makes any false statement, representation, record, report or other document filed or required to be maintained pursuant to this enforcement document, or who falsifies, tampers with, or knowingly renders inaccurate any backflow assembly, device or method required under this enforcement document shall be subject to civil and/or criminal penalties provided by state law.

1:24 CONSTITUTIONALITY AND SAVING CLAUSE

Should any provision, section, sentence, clause or phrase of this enforcement document, or the application of same to any person or set of circumstances, are for any reason held to be unconstitutional, void, invalid, or for any reason unenforceable, the validity of the remaining portions of this enforcement document, or its application to other persons or circumstances, shall not be affected; thereby, it being the intent of the Christmas Valley Water District in adopting and approving this enforcement document that no portion hereof or provision or regulation contained herein shall become inoperative or fail by reason of any unconstitutionality or invalidity of any other portion, provision, or regulation.