



PUBLIC UTILITY DISTRICT #1 OF CLALLAM COUNTY

CROSS CONNECTION POLICY

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Attachment to resolution 2107-18

PUBLIC UTILITY DISTRICT #1 OF CLALLAM COUNTY

CROSS CONNECTION POLICY

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Pursuant to Washington Administrative Code (WAC) 346-290-490, or as amended, it is the responsibility of the Public Utility District #1 of Clallam County to protect its drinking water by instituting and enforcing a cross connection control program. NOW, THEREFORE, THE PUBLIC UTILITY DISTRICT #1 OF CLALLAM COUNTY STIPULATES AS FOLLOWS:

1:01 DEFINITIONS

Except where specifically designated herein, all words used in this document shall carry their customary meanings. Words used in the present tense include the future and plural words include the singular. The word “shall” is always mandatory, and the word “may” denotes a use of discretion in making a decision. Any definition not found in this section will take its meaning from the WAC (246-290), or as amended, or in 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.

- (1) “Agreement” shall mean all agreements for service installation, meters and special service with any person, firm or corporation, or the authorized agents thereof.
- (2) “Air gap” shall mean a physical separation between the free-flowing end of a potable water supply pipeline and the overflow rim of an open or non-pressure-receiving vessel. To be an “approved air gap,” the separation must be at least twice the diameter of the inlet piping (supply pipe) measured vertically, and never be less than one (1) inch.
- (3) “Approved backflow prevention assembly” or “backflow assembly” or “assembly,” shall mean an assembly to counteract backpressure or prevent backsiphonage. This assembly must appear on the list of approved assemblies issued by the Washington State Department of Health. The assembly must be purchased and installed as a complete unit including two shut-off valves and test cocks.
- (4) “Auxiliary supply” shall mean any water source or system other than the Public Utility District #1 of Clallam County’s water. This will include, but is not limited to, wells, streams, ponds, and irrigation ditches.
- (5) “Backflow” shall mean the flow of water or other liquids, gases or solids from any source back into the distribution system. The flow of water in the opposite direction of its intended flow.
- (6) “Backflow Assembly Tester” shall mean a person holding a valid BAT certificate issued in accordance with the Washington Administrative Code 246-290-490 and the RCW 18.106, 18.27, and 70.119.
- (7) “Backpressure” shall mean backflow due to water pressure on the downstream side of the meter, which exceeds the operating pressure of the public potable water supply.
- (8) “Backsiphonage” shall mean backflow due to a negative or reduced pressure within the public potable water supply.

- (9) "Building Inspector" shall mean the Clallam County Building Inspector.
- (10) "Closed system" shall mean any water system or portion of a water system in which water is closed to atmosphere.
- (11) "Connection" shall mean any physical connection to the District water system by any water service of any private water system or pipeline extension.
- (12) "Contamination" shall mean the entry into or presence in a public water supply system of any substance, which may be harmful to health and/or quality of the water.
- (13) "County" shall mean Clallam County.
- (14) "Cross connection" shall mean any physical arrangement where a public water system is connected, directly or indirectly (actual or potential), with any other non-drinkable water system or auxiliary system, wells, sewer, drain conduit, swimming pool, storage reservoir, plumbing fixture, swamp coolers, or any other device which contains, or may contain, contaminated or polluted water, sewage, used water, or other liquid of unknown or unsafe quality which may be capable of imparting contamination or pollution 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.
- (15) "Cross Connection Specialist" or "CCS" shall mean a person holding a valid CCS certificate issued in accordance with the Washington Administrative Code who is employed by the District or under contract with the District.
- (16) "Degree of hazard" shall mean the low or high hazard classification that shall be attached to all actual or potential cross connections.
- (17) "Distribution system" shall mean all piping components of the District's system that serve to convey water from transmission mains linked to source, storage, and treatment facilities to the consumer excluding individual services.
- (18) "District" shall mean Public Utility District #1 of Clallam County.
- (19) "DOH" shall mean Washington State Department of Health.
- (20) "Double check valve backflow prevention assembly" or "double check assembly" or "double check" or "DCVA" or "DC" shall mean an assembly, which consists of two independently operating check valves, which are spring-loaded or weighted. The assembly comes complete with a shut-off valve on each side of the checks, as well as test cocks.

- (21) “Double check detector assembly” or “DCDA” shall mean an assembly which consists of two independently operating check valves which are spring-loaded or weighted. The assembly comes complete with a shut-off valve on each side of the checks, as well as test cocks to test the checks for tightness. It shall also be provided with a factory bypass arrangement with a meter and a minimum of an approved double check assembly.
- (22) “High Health hazard” shall mean an actual or potential threat of contamination of a physical, toxic or biological nature that would be a danger to health.
- (23) “In-premises protection” shall mean a method of protecting the health of consumers served by the customer’s plumbing system (i.e., located within the property lines of the customer’s premises) by the installation of an approved air gap, backflow prevention assembly or device at the point of hazard.
- (24) “Inspector”, “Surveyor” or “Specialist” shall mean a person holding a valid CCS certificate issued in accordance with the Washington Administrative Code, who meets the stipulations in this Policy and the most recent edition of the District’s Standard Operating Procedures Manual.
- (25) “Local Administrative Authority” or “LAA” shall mean the local official, board, department, or agency authorized to administer and enforce the provisions of the Uniform Plumbing Code and all other plumbing codes recognized by the State of Washington.
- (26) “Low health hazard” shall mean 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.
- (27) “Manager” shall mean District’s General Manager or General Manager Designee.
- (28) “Mobile unit” shall mean units connecting to the water system through a hydrant, hose bib, or other appurtenance of a permanent nature that is part of the District water system or a permanent water service to a premise. Examples can include, but are not limited to, the following: water trucks, pesticide applicator vehicles, chemical mixing units or tanks, waste or septage hauler trucks or units, sewer cleaning equipment, carpet or steam cleaning equipment, rock quarry or asphalt/concrete batch plants, or any other mobile equipment or vessel. Uses that are excluded from this definition are recreational vehicles at assigned sites or parked in accordance with other 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 District Policies pertaining to provision of water service to a premises.

- (29) “Person” shall mean a natural person (individual), corporation, company, association, partnership, firm, limited liability company, joint venture company or association, and other such entity.
- (30) “Plumbing hazard” shall mean an internal or plumbing-type cross connection in a consumer’s potable water system that may be either a pollutional or a contamination-type hazard. This includes, but is not limited to, cross connections to toilets, sinks, lavatories, wash trays, domestic washing machines and lawn sprinkling systems. Plumbing-type cross connections can be located in all types of structures including, but not limited to, homes, manufactured homes, apartment houses, hotels and commercial or industrial establishments.
- (31) “Pollutional hazard” shall mean an actual or potential threat to the physical properties of the water system or the potability of the public or the consumer’s potable water system but which would not constitute a health or system hazard, as defined. The maximum degree of intensity of pollution to which the potable water system could be degraded under this definition would cause a nuisance or be aesthetically objectionable or could cause minor damage to the system or its appurtenances.
- (32) “Potable water supply” shall mean any system of water supply intended or used for human consumption or other domestic use and meets all requirements established by the Safe Drinking Water Act and the DOH regulations.
- (33) “Premises” shall mean any piece of property to which water is provided, including, but not limited to, all improvements, mobile structures and structures located on it.
- (34) “Premises isolation” shall mean a method of protecting a public water system by installation of an approved air gap or approved backflow prevention assembly at the point of service (end of purveyor’s service pipe) to separate the customer’s plumbing system from the purveyor’s distribution system.
- (35) “Reclaimed water” shall mean effluent derived in any part from sewage from a wastewater treatment system that has been adequately and reliably treated, so that as a result of that treatment, it is suitable for beneficial use or a controlled use that would not otherwise occur, and it is no longer considered wastewater.
- (36) “Reduced pressure detector assembly” or “RPDA” shall mean an approved assembly consisting of two approved reduced pressure backflow assemblies, set in parallel, equipped with a meter on the bypass line to detect small amounts of water leakage or use.
- (37) “Reduced pressure principle backflow prevention assembly” or “reduced pressure principle assembly” or “RP” shall mean an assembly containing two

independently operating check valves together with a hydraulically-operated, mechanically independent pressure differential relief valve located between the check valves. The assembly shall include properly located test cocks and tightly closing shut-off valves at each end of the assembly.

- (38) “Retrofitting” shall mean the addition of new technology, features or parts which are added to or fitted onto older or outdated systems or parts.
- (39) “SOP” shall mean the most recent edition of the Public Utility District #1 of Clallam County’s Standard Operating Procedure Manual.
- (40) “Submerged sprinkler heads” shall mean the pop-up heads of the sprinkler system which have retracted and have become submerged in water pooled around the heads.
- (41) “Thermal expansion” shall mean the pressure created by the expansion of heated water.
- (42) “Unapproved auxiliary water supply” shall mean a water supply (other than the purveyor’s water supply) on or available to the consumer’s premises that is either not approved for human consumption by the health agency having jurisdiction or is not otherwise acceptable to the purveyor. This will include, but is not limited to, wells, streams, ponds and irrigation ditches/piping.
- (43) “Used water” shall mean any water supplied by the District to a customer’s property after it has passed through the service connection and is no longer under the control of the District.
- (44) “WAC” shall mean the most recent edition of the Washington Administrative Code.

1:02 PURPOSE

The purpose of this Policy is to protect the water system of Public Utility District #1 of Clallam County from contamination or pollution due to any existing or potential cross connections as defined in WAC 246-290-010, or as amended, this Policy and the District’s current SOP Manual.

1:03 CROSS CONNECTIONS REGULATED

- (1) No cross connections shall be created, installed, used or maintained within the territory served by the District, except in accordance with this Policy and the District's current SOP Manual.
- (2) The CCS for the District shall carry out or cause surveys to be carried out to determine if any actual or potential cross connections exist. If found necessary, an assembly commensurate with the degree of hazard will be required to be installed at the service connection.
- (3) The owner, occupant or person in control of the property is responsible for all cross connection control within the premises.
- (4) The owner, occupant or person in control of the property shall abide by all other District regulations.
- (5) District customers are required to notify the District prior to the installation of all backflow prevention assemblies for verification of the appropriate assembly.
- (6) The consumer agrees to immediately notify the District and the local health jurisdiction of any backflow incident occurring within the consumer's premises (i.e., entry of any contaminant/pollutant into the drinking water) and shall cooperate fully with the District to determine the reason for the backflow incident.

1:04 APPLICATION AND RESPONSIBILITIES

This Policy applies throughout the District and to every premise and property served by the District Water System. It applies to any premises, public or private, regardless of date of connection to the District water. Every owner, occupant and/or person in control of any concerned premises is responsible for compliance with the terms and provisions contained herein.

1:05 BACKFLOW PREVENTION ASSEMBLY REQUIREMENTS

A CCS shall determine the type of backflow assembly to be installed within the area served by the District. All assemblies shall be installed at the service connection unless it is determined by the CCS to install the assembly at an alternate location. The cross connection shall be eliminated or at a minimum, a double check valve assembly for premise isolation shall be required to be installed in each of the following circumstances, but the CCS is in no way limited to the following circumstances:

- (1) The nature and extent of any activity on the premises, or the materials used in connection with any activity on the premises, or materials stored on the premises, could contaminate or pollute the potable water supply.

- (2) Premises having any one or more cross connections or potential cross connections as that term is defined in the Policy, the District's current SOP Manual, the Washington Administrative Code and all applicable plumbing codes.
- (3) When a cross connection survey report form is required by the District to be filled out and the District has not received it.
- (4) Internal cross connections are present that are not correctable.
- (5) Intricate plumbing arrangements exist or plumbing subject to frequent changes is present that make it impractical to ascertain whether or not cross connections exist.
- (6) There is a repeated history of cross connections being established or re-established.
- (7) There is unduly restricted entry so that surveys for cross connections cannot be made with sufficient frequency to assure that cross connections do not exist.
- (8) Materials, chemicals or any substance or apparatus is being used that if backflow occurred contamination would result.
- (9) Installation of an approved backflow prevention assembly is deemed to be necessary in the judgment of the CCS to accomplish the purpose of this Policy.
- (10) In the event an in-premise assembly has not been tested or repaired as required by the WAC 346-290-490, or as amended, this Policy and the District's current SOP Manual.
- (11) If it is determined that additions or rearrangements have been made to the plumbing system without obtaining proper permits as required by the County Code Enforcement Division.
- (12) All high health hazard premises, which are included in but not limited to Table 9 of the WAC section 246-290-490, or as amended, are required to have premises isolation by installing a reduced pressure principle assembly in accordance with this Policy and the District's current SOP Manual.
- (13) When a garden hose attachment is connected to the premises plumbing, including but not limited to fertilizer applicators, pesticide applicators and radiator flush kits.
- (14) Where reclaimed or reused water systems are installed.

- (15) Premises on which any substance is handled under pressure so as to permit entry into the public water system.

1:06 AUXILIARY SUPPLY

All properties receiving irrigation water from a source other than from the District shall be required to have a minimum of a double check valve assembly at the service connection.

Any premise which has any other auxiliary supply as that is defined in Section 1:01 of this document and which is connected, directly or indirectly, to the District's water supply, will be required to install an assembly commensurate with the degree of hazard.

1:07 IRRIGATION SYSTEM USING THE DISTRICT'S WATER SUPPLY

All properties which use the District's water for irrigation shall be protected in accordance with the plumbing code. In the event any system is equipped with an injector system, or has submerged heads, a reduced pressure principle assembly will be required.

1:08 FIRE SYSTEMS

An approved double check detector backflow prevention assembly shall be the minimum protection on all new fire sprinkler systems using piping material that is not approved for potable water use, and/or that does not provide for periodic flow-through. A reduced pressure principle detector backflow prevention assembly must be installed, if any solution other than the potable water can be introduced into the sprinkler system. Retrofitting on fire sprinkler systems will be required in each of the following circumstances:

- (a) Where improper maintenance has occurred.
- (b) On all high hazard systems.
- (c) Wherever a CCS deems necessary.
- (d) Wherever required by the WAC.

1:09 TEMPORARY HYDRANT METERS AND VALVES

Backflow protection will be required on temporary hydrant meters and all other temporary connections, including blow-offs. An approved air gap or appropriate assembly, commensurate with the degree of hazard, will be determined on a case-by-case basis by the District's CCS. The air gap or assembly must be installed, inspected and maintained in accordance with the WAC, this Policy and the District's SOP Manual.

1:10 MOBILE UNITS

Any mobile unit or apparatus, as defined in Section 1 of this Policy, which uses the District's water from any premises or piping within the distribution system, shall first obtain permission from the District. The mobile unit will be inspected to assure appropriate backflow protection is installed in accordance with the District's most recent edition of the SOP Manual.

1:11 RIGHT-OF-WAY ENCROACHMENT

- (1) No person shall install or maintain a backflow prevention assembly upon or within any County, State or District right-of-way except as provided in this Section.
- (2) A backflow prevention assembly required by the District may be installed upon or within any County, State or District right-of-way only if the owner proves to the District that there is no other feasible location for installing the assembly, and installing it in the right-of-way will not interfere with traffic or utilities. The District retains the right to approve the location, height, depth, enclosure, and other requisites of the assembly prior to its installation.
- (3) All permits required by the County code to perform work in the right-of-way shall be obtained by the property owner or their lessee and/or tenant.
- (4) A property owner shall, at the request of the District and at the owner's expense, relocate a backflow prevention assembly which encroaches upon any right-of-way, when such relocation is necessary for street or utility construction or repairs for purposes of public safety.

1:12 PLUMBING CODE

As a condition of water service, customers shall install, maintain, and operate their piping and plumbing systems in accordance with all Washington State Plumbing Codes.

1:13 ACCESS TO PREMISES

Authorized employees of the District, with proper identification, shall have access during the hours of 8:00 a.m. to 5:00 p.m. to all parts of commercial, industrial and residential premises and within the buildings to which water is supplied. If access to the premises or the interior of a structure during these hours is denied, a reduced pressure principle assembly shall be required to be installed at the service connection to that premises.

1:14 TESTING AND REPAIRS

Backflow prevention assemblies shall be tested and repaired in accordance with the requirements set out in the WAC, this Policy and the most recent edition of the District's SOP Manual.

1:15 RESPONSIBILITIES OF BACKFLOW PREVENTION ASSEMBLY TESTERS

All backflow assembly testers operating within the District's water systems shall be certified in accordance with all applicable State regulations and shall comply with all stipulations in this Policy and the most recent edition of the District's SOP Manual.

1:16 MAINTENANCE OF ASSEMBLIES

Backflow prevention assemblies shall be maintained in accordance with the requirements set out in the WAC and the most recent edition of the District's SOP Manual.

1:17 INSTALLATION REQUIREMENTS AND SPECIFICATIONS

Backflow prevention assemblies shall be installed in accordance with the requirements set out in the WAC and the most recent edition of the District's SOP Manual.

1:18 THERMAL EXPANSION

If a closed system has been created by the installation of a backflow prevention assembly, it is the responsibility of the property owner to eliminate the possibility of thermal expansion.

1:19 PRESSURE LOSS

Any reduction in water pressure caused by the installation of a backflow assembly is not the responsibility of the District. The District will give reasonable assistance to the owner regarding information on adequate sizing of assemblies and proper plumbing practices in order to provide required pressure and flows for fire protection.

1:20 PARALLEL INSTALLATION

Premises where non-interruption of water supply is critical shall have two (2) assemblies of the same type installed in parallel. They shall be sized in such a manner that either assembly will provide the minimum water requirements while the two (2) together will provide the maximum water requirements.

1:21 NEW CONSTRUCTION

- (1) On all new non-residential construction, an approved backflow prevention assembly shall be installed at the service connection. The type of 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.

1:22 NON-RESIDENTIAL SERVICE CONNECTIONS

An approved backflow prevention assembly shall be required for all non-residential service connections in accordance with this Policy. Failure to complete a cross connection survey form or denying a CCS access to perform a site survey will result in the service connection being classified as a high health hazard.

1:23 RESIDENTIAL SERVICE CONNECTIONS

Any residential property, which has been determined to have an actual or potential cross connection and/or has violated the Plumbing Code, this Policy or the District's current SOP Manual in any way, shall be required to install an approved backflow prevention's assembly in accordance with this Policy.

1:24 RENTAL PROPERTIES

The property owner is responsible for all in-premise cross connections. It is the responsibility of the property owner to determine if a cross connection is created when the tenants change or the plumbing is altered in any way.

The property owner is responsible for the installation, testing and repair of all backflow prevention assemblies on his/her property.

1:25 RETROFITTING

Retrofitting shall be required on all service connections where an actual or potential cross connection exists, or where ever else the District deems retrofitting necessary.

Non-residential service connections that do not have an approved assembly installed will be surveyed by the District. A District CCS will evaluate the survey results to determine the degree of hazard. A backflow prevention assembly and an installation deadline will be required that is commensurate with the degree of hazard. In accordance with section 1:05 of this policy, service connections identified as being a low hazard will be required to install a double check valve backflow prevention assembly (DCVA) and service connections identified as being a high health hazard

will be required to install a reduced pressure backflow prevention assembly (RPBA). The District will track changes in premise use and plumbing in coordination with the Authority having jurisdiction (i.e. local plumbing code enforcement agency). The District will survey future changes and re-evaluate the degree of hazard and possibly change the backflow assembly requirement accordingly.

1:26 COSTS OF COMPLIANCE

All costs associated with the purchase, installation, inspections, testing, replacement, maintenance, parts, and repairs of the backflow assembly are the financial responsibility of the property owner.

1:27 RECOVER OF COSTS

Any water customer violating any of the provisions of this Policy and who causes damage to or impairs the District's water system, including, but not limited to, allowing contamination, pollution, any other solution or used water to enter the District's water system, shall be liable to the District for any expense, loss or damage caused by such violation. The District shall collect from the violator for the cost incurred by the 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 Policy and shall result in the termination of service.

1:28 EMERGENCY SUSPENSION OF SERVICE

The Manager or his designee may, without prior notice, suspend water service to any premises when such suspension is necessary to stop the eminent threat of any actual or potential cross connection as defined in this Policy and the most recent edition of the District's SOP Manual.

1:29 NON-EMERGENCY SUSPENSION OF SERVICE AND/OR INSTALLATION OF ASSEMBLY

The Manager or his designee may suspend, with proper notice, the water supply to any premises where the conditions of this Policy or the most recent edition of the District's SOP Manual have been violated.

In lieu of suspension of service, the District may install a reduced pressure principle backflow prevention assembly as premise isolation.

The owner of the property will be responsible for all costs associated with the purchase, installation and testing of this assembly.

1:30 PENALITIES

Any violation of this Policy or any regulation, rule or permit of the District issued pursuant to this Policy will result in additional administrative and investigative

expenses, as well as potential damage to part of the District's system. The exact amount of these expenses cannot be reasonably anticipated at the time this Policy is adopted. Based on the certainty of additional expense, and the uncertainty of the amount of that expense, the District shall charge any person, property owner, firm, corporation or business entity \$2,000.00 per violation of (a) this Policy or (b) any regulation, rule or permit of the District issued pursuant to this Policy. Each continuing day's violation under this Policy is a separate violation and will result in an additional \$2,000.00 charge. This provision shall not preclude the District from filing suit to enjoin any anticipated or actual violation. This provision shall not limit the District's right to collect from the violator any costs, expenses or damages that exceed the charges made against the violator under this provision, or enforcing any additional remedy that law and equity may allow. The District retains all legal rights and remedies available to it pursuant to local, state and federal law.

1:31 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 Policy or the District's current SOP Manual, or who falsifies, tampers with, bypasses or knowingly renders ineffective or inaccurate any backflow assembly, device or method required under this Policy, shall (in addition to civil and/or criminal penalties by state law) be subject to a penalty as established in the District's SOP Manual.

1:32 CONSTITUTIONALITY AND SAVING CLAUSE

That if any provision, section, clause or phrase of this Policy, 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 Policy or its application to other persons or circumstances shall not be affected thereby, it being the intent of the Board of Commissioners of the Public Utility District #1 of Clallam County in adopting this Policy 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.