ORDINANCE NO. 2000-07-045

AN ORDINANCE ADOPTING CROSS-CONNECTION CONTROL REGULATIONS TO PROTECT THE CITY'S WATER SUPPLY SYSTEM.

WHEREAS, Chapter 246-290 of the Washington Administrative Code Rules and Regulations governing public drinking water supplies requires protection of the public drinking water supply from contamination due to cross-connections; and

WHEREAS, Chapter 246-290 of the Washington Administrative Code Rules and Regulations governing public drinking water supplies requires that all cross-connections be eliminated or controlled; and

WHEREAS, Chapter 246-290 of the Washington Administrative Code Rules and Regulations governing public drinking water supplies requires that the Water Purveyor develop and implement a cross-connection control program; and

WHEREAS, revisions to Chapter 246-290 of the Washington Administrative Code Rules and Regulations governing public drinking water supplies have been adopted April 9, 1999; and

WHEREAS, the City has completed a thorough assessment of the current cross-connection control program, and has determined that the current cross-connection program must be updated to address revisions to Chapter 246-290 of the Washington Administrative Code Rules and Regulations; and

WHEREAS, the City of Bellingham establishes the following cross-connection control ordinance to protect the public drinking water system from the risk of contamination due to cross-connections,

NOW, THEREFORE, THE CITY OF BELLINGHAM DOES ORDAIN:

Section 1: "Bellingham Municipal Code Sections 15.08.260, 15.08.290, and 15.08.300 are hereby repealed and replaced by the following:

15.08.260 Cross-Connection Control

A. Abbreviations and Acronyms

DOH - Washington State Department of Health

RCW – Revised Code of Washington (Laws of the State)

WAC - Washington State Administrative Code;

B. Definitions

- "Approved air gap" means a physical separation between the free-flowing end of a potable water supply pipeline and the overflow rim of an open or non-pressurized receiving vessel. To be an air gap approved by the DOH, the separation must be at least:
 - 1. Twice the diameter of the supply piping measured vertically from the overflow rim of the receiving vessel, and in no case be less than one inch, when unaffected by vertical surfaces (sidewalls); and
 - 2. Three times the diameter of the supply piping, if the horizontal distance between the supply pipe and a vertical surface (sidewall) is less than or equal to three times the diameter of the supply pipe, or if the horizontal distance between the supply pipe and intersecting vertical surfaces (sidewalls) is less than or equal to four times the diameter of the supply pipe and in no case less than one and one-half inches.
- "Approved atmospheric vacuum breaker" means an atmospheric vacuum breaker of make, model, and size that is approved by the DOH. Atmospheric vacuum breakers that appear on the current approved backflow prevention assemblies list developed by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research, or that are listed, or approved by other nationally recognized testing agencies (such as the International Association of Plumbing and Mechanical Officials, American National Standards Institute, or Underwriter Laboratories) and acceptable to the local administrative authority are considered approved by the DOH.
- "Approved backflow preventer" means an approved air gap, an approved backflow prevention assembly, or an approved atmospheric vacuum breaker, relied upon by the purveyor for the protection of the public water system. The requirements of WAC 246-290-490 do not apply to backflow preventers installed for other purposes.
- "Approved backflow prevention assembly" means a reduced pressure backflow assembly, reduced pressure detector assembly, double check valve assembly, double check detector assembly, pressure vacuum breaker assembly, or spill resistant vacuum breaker assembly, of make, model, and size that is approved by the DOH. Assemblies that appear on the current approved backflow prevention assemblies list developed by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research, or other nationally recognized testing agencies and acceptable to the local administrative authority are considered approved by the DOH.
- "Auxiliary water supply" means a water supply, other than the purveyor's water supply, on or available to the consumer's premises.
- "Backflow" means the undesirable reversal of flow of water or other substances through a cross-connection into the public water system or consumer's potable water system by means of backpressure or backsiphonage.

- "Backpressure" means a pressure (caused by a pump, elevated tank or piping, boiler, or other means) on the consumer's side of the service connection that is greater than the pressure provided by the public water system and which may cause backflow.
- "Backsiphonage" means backflow due to a reduction in system pressure in the purveyor's distribution system and/or the consumer's water system.
- "Consumer" means any person receiving water from a point of delivery of the public water system. For purposes of cross-connection control, "consumer" means the owner or operator of a premise receiving water from a point of delivery of the public water system.
- "Consumer's water system," as used in WAC 246-290-490, means any potable and/or industrial water system that begins at a point of delivery from the public water system and is located on the consumer's premises. The consumer's water system includes all auxiliary sources of supply, storage, treatment, and distribution facilities, piping, plumbing, and fixtures under the control of the consumer.
- "Contaminant" means a substance present in drinking water that may adversely affect the health of the consumer or the aesthetic qualities of the water.
- "Cross-connection" means any actual or potential physical connection between a public water system or the consumer's water system and any source of non-potable liquid, solid, or gas that could contaminate the potable water supply by backflow.
- "Cross-connection control program" means the administrative and technical procedures the water purveyor implements to protect the public water system from contamination via cross-connections as required in WAC 246-290-490.
- "Cross-connection control specialist" means a person holding a valid Cross-connection control specialist certificate issued by DOH in accordance with chapter 246-292 WAC.
- "Director" means Director of Public Works or duly authorized representative.
- "DOH" means the Washington State department of health or health officer as identified in a joint plan of operation in accordance with WAC 246-290-030(1).
- "High health cross-connection hazard" means a cross-connection that could impair the quality of potable water and create an actual public health hazard through poisoning or spread of disease by a contaminant source.
- "Human consumption" means the use of water for drinking, bathing or showering, hand washing, food preparation, cooking, or oral hygiene.
- "In-premise protection" means a method of protecting the health of consumers served by the consumer's potable water system, located within the property lines of the consumer's premise by the

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installation of an approved air gap or approved backflow prevention assembly at the point of hazard, which is generally a plumbing fixture.

"Local administrative authority" means the local official, board, department, or agency authorized to administer and enforce the provisions of the Uniform Plumbing Code as adopted under chapter 19.27 RCW.

"Low health cross-connection hazard" means a cross-connection that could cause an impairment of the quality of potable water to a degree that does not create a hazard to the public health, but does adversely and unreasonably affect the aesthetic qualities of such potable waters.

"Point of delivery" means the point at which the consumer's water system connects to the public water system.

"Potable" means water suitable for human consumption.

"Premise" means a single building site, or single lot or aggregation of lots tied together by agreement for the purpose of obtaining a building permit or utility service.

"Premise isolation" means a method of protecting a public water system by installation of approved air gap or approved backflow prevention assembly at or near the service connection or alternative location acceptable to the purveyor to isolate the consumer's water system from the purveyor's distribution system.

"Public water system" means the water supply source, including all water treatment, storage, transmission, and distribution facilities, to the point of delivery to the consumer.

"Purveyor" means the City of Bellingham, owner and operator of the public water system.

"Service connection" means the point of delivery from which potable water is provided to a single-family residence, or other residential or nonresidential population.

"State board of health" and "board" means the board created by RCW 43.20.030.

"Uniform Plumbing Code" means the code adopted under RCW 19.27.031(4) and amended under chapter 51-46 WAC. This code establishes statewide minimum plumbing standards applicable within the property lines of the consumer's premises.

"Used water" means water that has left the control of the purveyor.

C. Applicability

All consumers with service connections to the purveyor's public water system.

D. Purpose

- 1. Protect the public water system from contamination due to backflow through cross-connections; and
- 2. Eliminate or control cross-connections between the public water system and the consumer's water system.

E. Responsibility

- 1. The consumer's responsibility for cross-connection control shall begin at the service connection.
- 2. Consumers shall be responsible for the:
 - a. Elimination of cross-connections when possible; or
 - **b.** Control of cross-connections at the service connection (premise isolation); or
 - c. Control of cross-connections, within the consumer's water system, by relying on in-premise protection when premise isolation is not required by WAC 246-290-490 and this method is approved by the Director.
- 3. Consumers are responsible for the installation, testing, inspection, repair, maintenance, and proper operation of approved backflow preventers required for the control of cross connections between their premise and the public water system.

F. General Requirements

- 1. The rules and regulations of the Washington State Department of Health as published in WAC 246-290-490 are hereby adopted by reference as they may be from time to time amended.
- 2. Consumers shall comply with the City's cross-connection control program policies and procedures as they may be from time to time amended.
- 3. An approved backflow preventer is required on all private fire lines, appropriate to the assessed degree of cross-connection health hazard, and shall incorporate a water meter for detecting water consumption. The approved backflow preventer shall be placed such that access for the City is provided to physically or electronically read the detecting meter.
- 4. Consumers shall permit periodic entry to their premise (in accordance with BMC 15.04.030), by a cross-connection control specialist, for the determination of cross-connection health hazards and compliance with cross-connection control requirements.

G. Enforcement

- 1. In the event a consumer fails to comply with cross-connection control requirements the Director shall have the authority to issue to the consumer a final order to achieve compliance with this Ordinance, WAC 246-290-490, and or City cross-connection control policy and procedures. The order shall include:
 - **a.** A description of the specific nature, extent and time of the violation and the damage or potential damage that reasonably might occur;
 - **b.** A notice that the violation cease and desist and, in appropriate cases, the specific corrective actions to be taken;
 - **c.** That water service will be denied until corrective actions are completed, or discontinued unless corrective actions are completed within a reasonable time to comply, depending on the circumstances.
 - **d.** The address, telephone number and contact person that the consumer may contact if a dispute exists as to the corrective action required;
 - **e.** That the consumer may request a hearing with the Hearings Examiner;
 - f. That the City will charge a turn-on and shut-off fee before service is resumed following discontinuance, and/or impose civil penalties;
 - g. That the local administrative authority will be notified; and
 - **h.** That service will not be shut off while a hearing is pending.
- 2. The local administrative official shall be notified prior to the City:
 - a. Denying water service; or
 - **b.** Discontinuing water service.
- 3. When an unprotected connection between the public water system and the consumer's water system constitutes an imminent threat of contamination to the City's public water system, water service may be shut off immediately without the notices provided above. In that case, notice of shut-off, corrective action, and appeal procedures and notice to the local administrative official shall be sent immediately upon such action being taken.

H. Civil penalty

- 1. In addition to any other remedy or sanction available, a consumer who fails to comply with a final order issued by the Director or Hearings Examiner pursuant to this chapter, or who fails to conform to the terms of an approval issued, shall be subject to a civil penalty.
 - **a. Amount of Penalty.** The penalty shall be not less than \$100 or exceed \$5000 for each violation. Each day of continued violation or repeated violation shall constitute a separate violation.
 - **b.** Aiding or Abetting. Any person who, through an act of commission or omission, aids or abets in the violation shall be considered to have committed a violation for the purposes of the civil penalty.
 - c. Notice of Penalty. A civil penalty shall be imposed by the Director, by a notice in writing, which shall be served either by certified mail with return receipt requested or by personal service, to the person incurring the same. The notice shall describe the violation, the date(s) of violation, and shall order the acts constituting the violation to cease and desist, and, in appropriate cases, require necessary corrective action within a specific time.
 - d. Appeal of Civil Penalty. Persons incurring a penalty imposed by the Director may appeal in writing within 10 days of the receipt of the notice of penalty to the Hearings Examiner. The Hearings Examiner shall hold a hearing to consider the appeal and may affirm, modify or reverse the penalty. Review of the Hearings Examiner's decision may be obtained by filing an action for a writ of certiorari with a court of competent jurisdiction within 10 days of the date of the decision.
- 2. Penalties imposed under this Section shall become due and payable 10 days after notice of the penalty is mailed or delivered, whichever occurs first, unless an appeal is filed. Whenever an appeal is made, penalties shall become due and payable after a final decision has been issued confirming all or part of the penalty. If the amount of a penalty owed is not paid within the time specified in this Section, the City may take actions necessary to recover such penalty.
- 3. Penalties shall be paid to the water fund.

I. Operating Policies

The Director shall promulgate and implement the City's policy on cross-connection control for the operation of the Cross-Connection Control Program. The Cross-Connection Control Program policy shall be enforced under the requirements of the City's Cross-Connection Control Ordinance.