

ORDINANCE NO. 2023-04 41-00952

AN ORDINANCE OF THE CITY OF WHEELER ESTABLISHING A CROSS CONNECTION CONTROL PROGRAM FOR THE CITY OF WHEELER WATER SYSTEM.

Received
April 1 2024
Cross Connection

WHEREAS, OAR 333-061-0070(1) states “(w)ater suppliers shall undertake cross connection control programs to protect the public water system from pollution and contamination”; and,

WHEREAS, OAR 333-061-0070(2) states “(t)he water supplier’s responsibility for cross connection control shall begin at the water supply source, include all public treatment, storage and distribution facilities under the supplier’s control, and end at the point of delivery to the water user’s premise”; now, therefore,

THE CITY OF WHEELER DOES ORDAIN AS FOLLOWS:

Section 1. Definitions

The following definitions apply unless the context clearly indicates or requires a different meaning. Any word or term not defined in this section will be defined as provided 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 AIR GAP" means a physical separation between the free-flowing discharge end of a potable water supply pipeline and an open or non-pressurized receiving vessel. An "Approved Air Gap" shall be at least twice the diameter of the supply pipe measured vertically above the overflow rim of the vessel and in no case less than 1 inch (2.54 cm), and in accord with Oregon Plumbing Specialty Code.
- (2) "APPROVED BACKFLOW PREVENTION ASSEMBLY" or "BACKFLOW ASSEMBLY" or "ASSEMBLY" means a backflow prevention assembly such as a Pressure Vacuum Breaker Backsiphonage Prevention Assembly, Spill-Resistant Pressure Vacuum Breaker Backsiphonage Prevention Assembly, Double Check Valve Backflow Prevention Assembly, Double Check-Detector Backflow Prevention Assembly, Reduced Pressure Principle Backflow Prevention Assembly, or Reduced Pressure Principle-Detector Backflow Prevention Assembly and the attached shutoff valves on the inlet and outlet ends of the assembly, assembled as a complete unit.
- (3) “AUXILIARY SUPPLY” means any water source or system other than the City of Wheeler Water System.

- (4) "BACKFLOW" means the flow of water or other liquids, mixtures, or substances into the distributing pipes of a potable supply of water from any sources other than its intended source, and is caused by backsiphonage or backpressure.
- (5) "BACKSIPHONAGE" means a drop in distribution system pressure below atmospheric pressure (partial vacuum), that would cause, or tend to cause, water to flow opposite of its intended direction.
- (6) "CERTIFIED BACKFLOW ASSEMBLY TESTER" means a person who has successfully completed and maintains all requirements as established by Oregon Health Authority to be a tester in the state of Oregon.
- (7) "CERTIFIED CROSS CONNECTION CONTROL SPECIALIST" means a person who has successfully completed and maintains all requirements as established by the Oregon Health Authority to be a Specialist in the state of Oregon.
- (8) "CITY" means the City of Wheeler.
- (9) "CITY WATER SYSTEM" ("System") refers to and means the City of Wheeler Water System, which includes 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 City of Wheeler's potable water with which the System is supplied.
- (10) "CONTAMINATION" means the entry into or presence in a public water supply system of any physical, chemical, biological, or radiological substance or matter which may be deleterious to health and/or quality of the water.
- (11) "CROSS CONNECTION" means any actual or potential unprotected connection or structural arrangement between the public or user's potable water system and any other source or system through which it is possible to introduce into any part of the potable system any used water, industrial fluid, gas, or substances other than the intended potable water with which the system is supplied. Bypass arrangements, jumper connections, removable sections, swivel, or change-over devices, and other temporary or permanent devices through which, or because of which, backflow can occur are considered to be cross connections.
- (12) "DEGREE OF HAZARD" means either pollution (non-health hazard) or contamination (health hazard) and is determined by an evaluation of hazardous conditions within a system.
- (13) "OHA" means Oregon Health Authority.

- (14) “DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY”, “DOUBLE CHECK ASSEMBLY”, “DOUBLE CHECK” or “DCVA” means an assembly of two independently acting approved check valves, including tightly closing resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks. This assembly is designed to protect against a non-health hazard.
- (15) “HEALTH HAZARD” means an impairment of the quality of the water that could create an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids, waste, or other substances.
- (16) “MANAGER” means the City of Wheeler City Manager or his/her designee.
- (17) “MOBILE UNITS” means units that are temporary in nature, connecting to the water system through a legally permitted hydrant, hose bibb, or other appurtenance of a permanent nature that is part of the City of Wheeler’s water system 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 City of Wheeler Water System. Uses that are excluded from this definition are recreational vehicles at assigned sites or parked in accordance with other City of Wheeler policies pertaining to recreational vehicles and homeowner devices that are used by the property owner in accordance with other provisions of this, or other, City of Wheeler policies pertaining to provision of water service to a premises.
- (18) "NON-HEALTH HAZARD" means an impairment of the quality of the water to a degree that does not create a hazard to the public health, but does adversely affect the aesthetic qualities of such water for potable use.
- (19) “OAR” means Oregon Administrative Rule(s) effective February 1, 2023 or as amended after the date of this ordinance, adopted by the OHA, Public Health Division, related to Public Water Systems including but not limited to Chapter 333-Division 61, -0005 Purpose, -0020 Definitions and -0070 through -0073 Cross Connection program.
- (20) “PERSON(S)” means any individual, corporation, association, firm, partnership, municipal, state or federal agency, or joint stock company and includes any receiver, special master, trustee, assignee, or other similar representative thereof.
- (21) “POINT OF USE ISOLATION” 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.

- (22) "POLLUTION HAZARD" means 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 intensity of pollution to which the potable water system could be degraded under this definition would cause minor damage to the system or its appurtenances.
- (23) "PREMISES" means real estate and the structures on it.
- (24) "PREMISES ISOLATION" means the practice of protecting the public water supply from contamination or pollution by installing backflow prevention assemblies at, or near, the point of delivery where the water supply enters the premises. Premises isolation does not guarantee protection to persons on the premises.
- (25) "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 operating, mechanically independent pressure differential relief valve located between the check valves and at the same time below the first check valve. The unit shall include properly located resilient seated test cocks and tightly closing resilient seated shutoff valves at each end of the assembly. This assembly is designed to protect against a non-health hazard or a health hazard.
- (26) "RESIDENT" means a person or persons living within the area(s) served by the City of Wheeler Water System.
- (27) "RETROFITTING" means to furnish a service connection with parts or equipment made available after the time of construction or assembly installation.
- (28) "SPECIALIST" means an Oregon Health Authority certified cross connection Specialist, either employed with or contracted by the City of Wheeler.
- (29) "SUBMERGED HEADS" means irrigation sprinkling or delivery devices that are located below the surface of the landscaped area in which they are installed.
- (30) "THERMAL EXPANSION" means the pressure increase due to a rise in water temperature that occurs in water piping systems when such systems become "closed" by the installation of a backflow prevention assembly or other means, and will not allow for expansion beyond that point of installation.

Section 2. Application and Responsibilities

This ordinance applies throughout the City of Wheeler Water System and to every premises and property served with water by the City. It applies to all premises, regardless of date of

connection to the City Water System. Every owner, occupant or person in control of any concerned premises is responsible for complying with the provisions of this ordinance.

Section 3. Cross Connections Regulated

- (1) No cross connections shall be created, installed, used or maintained within the area(s) served by the City, except in accordance with this ordinance.
- (2) The Specialist 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 installed 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) The owner of any premises found on Table 42 “Premises Requiring Isolation” of OAR 333-061-0070 shall install a Reduced Pressure Backflow Assembly at the service connection in accordance with this administrative rule. Premises with cross connections not listed or defined in Table 42 “Premises Requiring Isolation” must be individually evaluated. The water supplier must require the installation of an approved backflow prevention assembly or an approved air gap commensurate with the degree of hazard on the premises, as defined in Table 43 “Backflow Prevention Methods”.
- (5) It is the responsibility of the property owner/occupant of the premises to purchase, install, test, repair and maintain all backflow assemblies.
- (6) If there is a change in ownership of any property within the City’s service area, it is the responsibility of the new owner to determine that all assemblies are in compliance with this ordinance.
- (7) If a point-of-use assembly has not been tested or repaired as required, the installation of a reduced pressure principle assembly will be required at the service connection.
- (8) 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 City without proper protection from the potential of backflow occurring.
- (9) The use of any type of radiator flush kits attached to the premises plumbing is not allowed within the City without proper protection from backflow occurring.

Section 4. Backflow Prevention Assembly Requirements

A Specialist employed by or under contract with the City shall determine the type of backflow assemblies to be installed within the City. All assemblies shall be installed at the service connection unless it is determined by the Specialist and approved by the City Manager that a

specific assembly should be installed at the point of use. An approved assembly shall be required in each of the following circumstances, but the Specialist 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 the City Water System, the 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 premises, or the materials used in connection with any activity at premises, or materials stored at a premises, could contaminate or pollute the City Water System.
- (3) When a premises has one (1) or more cross connections, as that term is defined in Section 1.
- (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 City Manager.
- (10) Any and all used water return systems.
- (11) There is piping or equipment for conveying liquids other than potable City 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 Specialist to be necessary to accomplish the purpose of this ordinance.
- (13) Wherever reclaimed water or ditch water is used on the premises.
- (14) When premises with an auxiliary water supply are interconnected to the City Water System.

Section 5. New Construction and/or Change in Ownership

- (1) On all new non-residential construction and/or if there is a change in ownership on premises supplied with non-residential water service, 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 Specialist.
- (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 premises.

Section 6. Retrofitting

Retrofitting shall be required at all service connections where an actual or potential cross connection exists, and wherever else the City deems retrofitting is necessary to comply with the OAR and this ordinance.

Section 7. Irrigation Systems

All irrigation systems shall be protected according to plumbing code regulations. In the event any system is equipped with an injector system, a reduced pressure principle assembly will be required.

Section 8. 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 Oregon Plumbing Specialty Code.

Section 9. Wholesale Customers

Any customer, including other water suppliers, who has a contract for water services with the City must have an active, ongoing cross connection program. The cross connection program must be approved by the City Manager. The City Manager reserves the right to require a reduced pressure principle assembly at the interconnect.

Section 10. Mobile Units

Any person responsible for any mobile unit or apparatus, as defined in Section 1 of this ordinance, which uses the water from any premises within the City, shall first obtain a permit

from the City and have the unit or apparatus inspected to assure an approved air gap or reduced pressure principle assembly is correctly installed.

Section 11. Installation Requirements

All backflow prevention assembly installations shall follow the requirements as stipulated by the City and OAR Chapter 333, Division 61.

If the premises isolation assembly is allowed to be installed at an alternate location, the City 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 OHA. All backflow prevention assemblies required under this section shall be of a type and model approved by the OHA.

Section 12. Pressure Loss

Any decrease in water pressure caused by the installation of a backflow assembly shall not be the responsibility of the City.

Section 13. Fire Systems

An approved double check 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 assembly must be installed, if any solution other than potable water can be introduced into the sprinkler system. Retrofitting on fire sprinkler systems will be required in each of the following circumstances:

- (1) Where improper maintenance has occurred;
- (2) On all high hazard systems;
- (3) Wherever a Specialist deems necessary; and
- (4) Wherever required by the OAR or state law.

In the event an assembly is installed on a designated lateral, a detector assembly commensurate with the degree of hazard will be required.

Section 14. 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 Specialist.

Section 15. Oregon Plumbing Specialty Code

As a condition of water service, a customer shall install, maintain, and operate the customer's piping and plumbing systems in accordance with the current Oregon Plumbing Specialty Code, or as amended. If there is a conflict between this ordinance and the Oregon Plumbing Specialty Code, the provision that is stricter will prevail.

Section 16. Access to Premises

Authorized City personnel with proper identification and sufficient notice to the owner or occupant 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 to access the property or to the interior of a structure during reasonable hours for inspection, a reduced pressure principle assembly will be required to be installed at the service connection to that premises.

Section 17. Annual Testing and Repairs

All backflow prevention assemblies installed within the area(s) served by the City shall be tested immediately upon installation, and at least annually thereafter by an OHA-certified backflow assembly tester and in accordance with all applicable regulations. 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 or replaced it must be retested within 24 hours.

All repairs on backflow assemblies within the City's service area must be performed according to all State and County regulations. Assemblies protecting health hazard connections must be repaired or replaced within 24 hours. Assemblies protecting non-health hazard connections must be repaired or replaced within 10 business days.

Section 18. Maintenance of Assemblies

Backflow prevention assemblies shall be maintained, tested and repaired in accordance with the requirements set out in this ordinance and Oregon statutes and regulations. The assembly owner is responsible for protecting the assembly from freezing and vandalism.

Section 19. Responsibilities of Backflow Prevention Assembly Testers

- (1) All backflow assembly testers operating within the City's service area shall be certified in accordance with all applicable regulations of the OHA.

- (2) Persons certified as backflow assembly testers are required to comply with 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 repairs to the City within 10 days of completing the test.

Section 20. Costs of Compliance

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

Section 21. Violation; Penalties

(1) Violations Established.

A. Allowing a cross connection to occur or failing to comply with any required provision of this ordinance, constitutes a violation of this ordinance.

B. Causing damage to or impairing the City Water System, including, but not limited to, allowing contamination, pollution, any other solution or used water to enter the City Water System, constitutes a violation of this ordinance.

C. This ordinance does not prohibit the city from seeking other alternative remedies set forth in this code or the laws of the state, including but not limited to abatement of nuisances under city ordinance and enforcement authorized under ORS Chapter 448. The city may also file suit to enjoin any violation, or seek any remedy provided under state or federal law.

(2) **Penalty for Violation.** Any person, property owner, firm, corporation or business entity convicted of violating this ordinance or any regulation, rule or permit of the City issued pursuant to this ordinance is liable to the City for a forfeiture in an amount not less than \$250.00 or more than \$1,000.00 per violation. Each day of violation constitutes a separate offense.

(3) **Additional Penalty.** As an additional penalty, a person convicted of violating this ordinance is liable to the City for a forfeiture in an amount equal to the expense, loss or damage to the City Water System, as determined by the City Manager and approved by the City Council, occurring as a result of the violation.

Section 22. Discontinuing Water Service

(1) The following shall be sufficient cause for the discontinuance of public water service to the premises pursuant to OAR 333-061-0070.

- A. Failure to remove or eliminate an existing unprotected or potential cross connection;
- B. Failure to install a required approved backflow prevention assembly;
- C. Failure to maintain an approved backflow prevention assembly; or
- D. Failure to conduct the required testing of an approved backflow prevention assembly.

(2) In the case of an extreme emergency or where an immediate threat to life or public health is found to exist, discontinuance of public water service to the premises shall be immediate.

(3) In lieu of discontinuing water service, the City may install a reduced pressure assembly at the meter at the property owner's expense. Testing, maintenance and repair of the assembly will be the responsibility of the property owner.

Section 23. Imminent Threat (Emergency Suspension of Service)

The City Manager or his or her designee may suspend water service without prior notice to any premises when suspension is necessary to stop the imminent threat of an actual or potential cross connection as defined in this ordinance.

Section 24. Non-Imminent Threat (Non-emergency Suspension of Service)

With 24 hours notice, the City Manager or his or her designee may suspend the water supply to any premises where a violation of this ordinance has occurred.

Section 25. 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 ordinance, or who falsifies, tampers with, or knowingly renders inaccurate any backflow assembly, device or method required under this ordinance, shall be subject to civil and/or criminal penalties on conviction of such crimes or offenses as provided by state law.

Section 26. Enforcement; Costs

All costs and fees associated with any disconnect or reconnect of service resulting from enforcement of this ordinance are the sole responsibility of the property owner.

Section 27. Savings Clause

If any provision of this ordinance, held by a court of competent jurisdiction to be invalid the invalid provision shall be severed and if the ordinance as altered effects the purposes for which it

was adopted, then the remaining provisions not held invalid or unenforceable shall continue to be valid and enforceable to the extent allowed by law.

Section 28. Previous Rules Repealed

City of Wheeler Code of Ordinances, Title V, Chapter 50, §50.21 (F) (Service Line Check Valve) is hereby repealed.

PASSED by the Council this 17 day of October 2023.

APPROVED by the Mayor this 17 day of October 2023.

CITY COUNCIL WHEELER, OREGON

Aye

Nay

Absent / Abstain



Karen Matthews, President

X

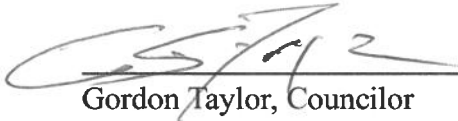
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Heidi Stacks, Councilor

X

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Gordon Taylor, Councilor

X

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Deanne Ragnell, Councilor

X

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Walt Porter, Councilor

X /


ATTEST, Clif Kemp, Mayor



Pax Broder, City Manager