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3.48.010 Purpose. To supplement Yamhill Municipal Code Chapters 3.04 thru 3.44 and provide more specified and detailed Rules and Regulations for the operation of the Water Department of the City of Yamhill; and

To protect the public potable water supply of the City of Yamhill from the possibility of contamination or pollution by isolating within the customer's system such contaminants or pollutants which could backflow into the public water system; and

To promote the elimination or control of cross-connections, actual or potential, between the customer's public water system delivered potable water and any non-potable water system(s), plumbing fixtures or industrial fluids systems; and

To provide for the maintenance, control, inspection, testing and use of cross-connections and backflow prevention assembly(s) which will systematically and effectively prevent the contamination or pollution of potable water systems. (Ord. 381, §1.1, 1986)

3.48.020 Definitions.

"Approved Methods or Assembly(s)". Accepted methods or assembly(s) for water quality control using applicable specifications stated or cited in this Title; i.e., approved by the Superintendent. (Ord. 381, §2.1, 1986)

"Auxiliary Water Supply". Any water supply on the customer's premises or available to the customer other than the public water supply. (Ord. 381, §2.2, 1986)

"Backflow". The reversal of the normal flow of water caused by either back-pressure or back-siphonage. (Ord. 381, §2.3, 1986)

"Back-Pressure". The flow of water or other liquids, mixtures or substances under pressure into the distribution pipes of a potable water supply system from any source or sources other than the intended source. (Ord. 381, §2.4, 1986)

"Back-Siphonage". The flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply system from any source or sources other than the intended source. (Ord. 381, §2.5, 1986)

"Backflow Prevention Assembly(s)". An assembly or means designated to prevent backflow. Three types of backflow prevention assembly(s) are applicable to and may be required by this Title. They are the air gap, reduced pressure principle backflow prevention assembly or (RP) and the double check valve assembly. (Ord. 381, §2.6, 1986)

"Contamination". Means an impairment of the quality of the potable water by sewage, industrial fluids or waste fluids, compounds or other materials to a degree which creates an actual or a potential hazard to public health through poisoning or through the spread of disease. (Ord. 381, §2.9, 1986)

"Cross-Connection". Any actual or potential physical connection or arrangement of piping or fixtures between two otherwise separate piping systems, one of which contains potable water and the other water or industrial fluids of questionable safety, through which, or because of which, backflow may occur into the potable water system. This would include any temporary connections, such as swing connections, removable sections, four-way plug valves, spools, dummy sections of pipe, swivels or change-over devices or sliding multi-part tubes. (Ord. 381, §2.10, 1986)

"Cross-Connection Controlled". A connection between a potable water system and a non-potable water system with an approved backflow prevention assembly properly installed and maintained so that it will continuously afford the protection commensurate with the degree of hazard. (Ord. 381, §2.11, 1986)

"Cross Connection - Control by Containment". The installation of an approved backflow prevention assembly at the water service connection to any customer's premises where it is physically and economically infeasible to find and permanently eliminate or control all actual or potential cross-connections within the customer's water system; or, it shall mean the installation of an approved backflow prevention assembly on the service line leading to and supplying a portion of the customer's water system where there are actual or potential cross-connections which cannot be effectively eliminated or controlled at the point of the cross-connection. (Ord. 381, §2.12, 1986)

"Customer's Premises". The area controlled by the customer which is receiving City water service to include but not be limited to private residences and businesses, and which is the point at which the public water system ends. (Ord. 381, §2.14, 1986)

"Hazard, Degree Of; Related Definitions". An evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system. (Ord. 381, §2.15, 1986)

"Hazard, Health". Any condition, device or practice in the water system and its operations which could create, or in the judgment of the Superintendent, may create a danger to the health and well-being of the water consumer. (Ord. 381, §2.15.1, 1986)

"Hazard, Plumbing". A plumbing type cross-connection in a consumer's potable water system that has not been properly protected by an approved air-gap backflow prevention assembly. (Ord. 381, §2.15.2, 1986)

"Hazard, Pollutional". An actual or potential threat to the physical properties of the water system or to the potability of the public or the consumer's water system, which would constitute a nuisance or be aesthetically objectionable, but would not be dangerous to health. (Ord. 381, §2.15.3, 1986)

"Hazard, System". An actual or potential threat of severe damage to the physical properties of the public potable water system or the consumer's potable water system or of a pollution or contamination which would have a protracted effect on the quality of the potable water in the system. (Ord. 381, §2.15.4, 1986)

"Independent Inspector, Aka Inspector". An individual, other than the Superintendent, who is currently licensed and certified by the State of Oregon to inspect backflow prevention assembly(s) and devices. (Ord. 381, §2.16, 1986)

"Industrial Fluids System". Any system containing a fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollutional or plumbing hazard if introduced into an approved water supply. This may include, but not be limited to: polluted or contaminated waters, all types of "used waters" originating from the public potable water system which may have deteriorated in sanitary quality; chemicals in fluid form; plating acids and alkalines; circulating cooling water connected to an open cooling tower and/or towers that are chemically or biologically treated or stabilized with toxic substances; contaminated natural waters such as from wells, springs, streams, rivers, irrigation canals or systems, etc.; oils, gases, glycerine, paraffins, caustic and acid solutions and other liquid and gaseous fluids used in industrial or other purposes or for fire-fighting purposes. (Ord. 381, §2.17, 1986)

"Pollution". Means the presence of any foreign substance (organic, inorganic or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such waters for domestic use. (Ord. 381, §2.18, 1986)

"Water, Potable". Any water which, according to recognized standards, is safe for human consumption. (Ord. 381, §2.21, 1986)

"Water, Nonpotable". Water which is not safe for human consumption or which is of questionable potability. (Ord. 381, §2.22, 1986)

"Water, Service Connection". The terminal end of a service connection from the public potable water system, i.e., where the Superintendent loses jurisdiction and sanitary control over the water at its point of delivery to the customer's water system. If a meter is installed at the end of the service connection, then the service connection shall mean the downstream end of the meter. Service connection shall also include water service connection from a fire hydrant and all other temporary or emergency water service connections from the public potable water system. (Ord. 381, §2.23, 1986)

"Water, Used". Any water supplied by a Superintendent from a public potable water system to a consumer's water system after it has passed through the point of delivery and is no longer under the sanitary control of the Superintendent. (Ord. 381, §2.24, 1986)

"Water System, Related Definitions". The total water supply system comprised of the public water system and the customer's water system. (Ord. 381, §2.25, 1986)

"Public Water System". The public water system shall consist of the water source facilities and the water distribution system; and shall include all those facilities of the water system under the complete control of the Superintendent, up to the point where the customer's water system begins. (Ord. 381, §2.25.1, 1986)

"Water Source". All components of the facilities utilized in the production, treatment, storage and delivery of water to the distribution system. (Ord. 381, §2.25.2, 1986)

"Distribution System". The network of conduits used for the delivery of water from the water source to the customer's water system. (Ord. 381, §2.25.3, 1986)

"Customer's Water System". Those parts of the facilities beyond the termination of the public water system which are utilized in conveying public water system delivered water to points of use on the customer's premises. (Ord. 381, §2.25.4, 1986)

3.48.030 Duties of Superintendent/Required Installation of Backflow Prevention Assembly(s)/Penalty for Failure to Install Such Assembly. The Superintendent shall be responsible for the protection of the public water system from contamination or pollution due to the backflow of contaminants or pollutants through the water service connection. If in the Superintendent's judgment cross-connection control by containment is required anywhere on the customer's premises, the Superintendent or his designated agent shall give written notice to said customer to install an approved backflow prevention assembly(s) on the customer's premises. The Superintendent may specify the location, type and methods of installation of all such assembly(s). Such approved assembly(s) shall be installed by customer at customer's expense not later than 10 days from the date of said written notice or at any earlier time required by the Superintendent or his agent as may be stated in said written notice, unless, however, the type of assembly required by the Superintendent is disputed and the customer appeals pursuant to Section 3.48.060(F) below, in which case the customer shall install such assembly(s) not later than 10 days from the date of the report of the independent inspector; failure, refusal or inability of customer to install, have tested and maintain said assembly(s) shall constitute a ground for discontinuing water service to the premises until such requirements have been met. (Ord. 381, §3.0, 1986)

3.48.040 Public Water Service Connection. No water service connection to any customer's premises shall be installed or maintained by the Water Department unless the public water supply is protected as required by State laws and regulations and this Title. Service of water to any customer's premises shall be discontinued by the Superintendent if a backflow prevention assembly required by this Title is not installed, tested and maintained, or if it is found that a backflow prevention assembly has been removed, by-passed, or if an unprotected cross-connection exists on the premises. Service will not be restored until such conditions are corrected. (Ord. 381, §4.1, 1986)

3.48.050 Additional Backflow Prevention Requirements. An approved backflow prevention assembly shall also be installed on each domestic, fire or irrigation service line to a customer's water system at or near the property line or immediately inside the building being served; but, in all cases, before the first branch line leading off the service line wherever the following conditions exist:

(A) In the case of customer's premises having an auxiliary water supply which is not or may not be of safe bacteriological or chemical quality and which is not acceptable as an additional source by the Superintendent.

(B) In the case of customer's premises on which any industrial fluids or any other objectionable substance is handled in such a fashion as to create an actual or potential hazard to the public water system.

(C) In the case of a customer's premises having (1) internal cross-connection(s) that cannot be permanently corrected or controlled, or (2) intricate plumbing and piping arrangements or where entry to all portions of the customer's premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not dangerous cross-connections exist.

(D) The building or structure is more than two stories or higher than 32 feet above the water main servicing it. (Ord. 381, §4.2, 1986)

3.48.060 Type of Assembly; Degree of Hazard/Customer Appeal. The type of backflow prevention assembly required shall depend on the degree of hazard which exists as follows:

(A) In the case of any customer's premises where there is an auxiliary water supply as stated in Section 3.48.050(A) and it is not subject to any of the following rules, the public water system shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly.

(B) In the case of any customer's premises where there is water or substance that would be objectionable but not hazardous to health if introduced into the public water system, the public water system shall be protected by an approved double check valve assembly.

(C) In the case of any customer's premises where there is any material dangerous to health which is handled in such a fashion as to create an actual or potential hazard to the public water system, the public water system shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly. Examples of premises where these conditions will exist include sewage treatment plants, sewage pumping stations, chemical manufacturing plants, hospitals, mortuaries and plating plants.

(D) In the case of any customer's premises where there are "uncontrolled" cross-connections, either actual or potential, the public water system shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly at the water service connection.

(E) In the case of any customer's premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete in-plant cross-connection survey, the public water system shall be protected against backflow from the premises by either an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly on each water service connection to the premises.

(F) In the event the customer does not agree with the type of backflow prevention assembly(s) required by the Superintendent, the customer may appeal the type of such required assembly by strictly complying with the following process:

(1) Within seven (7) days from the date of the notice from the Superintendent to the customer describing the type of assembly(s) required, customer in writing, must notify the Superintendent that the customer has hired an independent inspector and is appealing from having to install the type of assembly(s) required by the Superintendent. Such notice shall contain the name of the inspector, the date and time in which the inspection is to take place, and the location of the inspection.

(2) Customer shall instruct said inspector to file a written report of the inspector's findings as to the type of backflow prevention assembly(s) needed with the Superintendent, the City and the State of Oregon.

It shall be the right of the Superintendent or his designated agent to witness the inspection. Failure of customer to hire the services of a state licensed and certified inspector shall be grounds for dismissal of customer's appeal by the City.

If the independent inspector agrees with the Superintendent as to the type of assembly(s) required, the cost of such inspection shall be borne solely by the customer. If said inspector's finding is different than the Superintendent and if a less expensive assembly(s) is recommended, the City shall pay up to \$50.00 of the customer's costs for the independent inspection. The type of backflow prevention assembly(s) required by the inspector shall be the type installed by the customer, regardless of the Superintendent's prior holding. (Ord. 381, §4.3, 1986)

3.48.070 Backflow Prevention Assembly(s), Requirements/Adoption of A.W.W.A., F.C.C.C. And H.R. Standards and Specifications. The type of backflow prevention assembly required herein shall be a model and size approved by the State Health Division and shall be in compliance with Rule 61-070(6) of Oregon Administrative Rules Chapter 333. The term "Approved Backflow Prevention Assembly" shall mean an assembly that has been manufactured in full conformance with the standards established by the American Water Works Association (A.W.W.A.) entitled:

AWWA C506-84 Standards for Reduced Pressure Principle and Double Check Valve Backflow Prevention Devices, or latest revision;

and, have met completely the laboratory and field performance specifications of the Foundation for Cross-Connection and Hydraulic Research (F.C.C.C. and H.R.) of the University of Southern California established by specifications of backflow prevention assembly(s) - Section 10 of the most current issue of the "Manual of Cross-Connection Control."

Said A.W.W.A. and F.C.C.C. and H.R. standards and specifications have been adopted by the State of Oregon Health Division and are hereby adopted by the City of Yamhill. (Ord. 381, §4.4, 1986)

3.48.080 Inspection; Testing; Filing of Reports.

(A) Any backflow prevention assembly which may be required by the Superintendent, independent inspector, or the State to be installed on a customer's premises for the protection of the public water supply shall be tested at the time of installation and, any time the assembly is moved or relocated, immediately after relocation or moving. The customer must forward the results of such testing to the Superintendent and State Health Division, within 10 days of the date of installation or relocation.

(B) The customer must order and cause to be performed, a test of each backflow prevention assembly annually, or within 30 days after, the anniversary date of the initial testing. The Superintendent may require more frequent testing in order to assure the assembly is properly functioning in those installations which represent a serious health hazard as determined by the Superintendent.

(C) The customer shall notify the Superintendent in advance when any tests are to be undertaken so that an official representative of the Superintendent may witness the tests if so desired. The expense of the tests and of any necessary repairs, replacements or overhauls of the backflow prevention assembly(s) shall be at the sole expense of the customer.

(D) If the Superintendent has not received the results of the test within 30 days of the anniversary date for annual testing or within 10 days of the date of installation or relocation, or upon the Superintendent's discovery that the assembly was installed without testing as applicable, the Superintendent may order the test and add the cost of the test onto the customer's water bill.

(E) If the results of the test ordered by the Superintendent or the customer indicate that repairs are necessary, the repairs must be made and a new test taken and results of the test forwarded to the Superintendent and State Health Division within 10 days of the date of the first test.

(1) If the Superintendent has not received evidence of the repairs and the results of the second test within 10 days of the first test, the City may have the repairs and second test made and add the cost to the property owner's water bill.

(2) This section shall apply to all tests and repairs until the tests show the backflow prevention assembly(s) is/are functioning properly.

(F) The Superintendent, in accordance with this Title, may discontinue the water service of any person who refuses or fails to pay such testing or repair, and have the charges added to the customer's water bill.

(G) All tests required to be performed under this section must be performed by an independent inspector, licensed and certified by the State of Oregon.

(H) Records of all tests, repairs, replacements and overhauls of backflow prevention assembly(s) shall be forwarded by the customer to the Superintendent and the State Health Division. (Ord. 381, §4.5, 1986)

3.48.090 Additional Customer Obligations. Any installation, corrective measure, disconnection or other charge to a backflow prevention assembly shall be the sole expense of the customer.

The cost of any change required in the public water system outside the property and any charges for cut-off or disconnection shall be added to the charges against the customer's premises which necessitated the expenditures. (Ord. 381, §4.6, 1986)

3.48.100 Application to Mobile Apparatus. Any customer using the public water system for a mobile apparatus must provide for backflow prevention assembly(s) pursuant to this Title. (Ord. 381, §4.7, 1986)

3.48.110 Future Cross-connections. Cross-connections are hereby declared a hazard because of their actual or potential threat to the safety of the public water system and no customer shall be served nor public water shall be delivered to any structure hereafter erected until the same shall have been inspected by the Superintendent for possible cross-connections and been approved as being free from the same. No future cross-connections of any kind will be allowed on customer's premises. (Ord. 381, §5.1, 1986)

3.48.120 Existing Cross-Connections. Customers shall immediately notify the Superintendent of existing cross-connections on customer's premises and allow Superintendent or his designated agent to inspect the same. The Superintendent shall notify customer in writing as soon after such inspection as is practicable of the type of backflow prevention assembly required to eliminate the actual or potential hazard posed by such cross-connection. Customer shall then install such a backflow prevention assembly, the type of which being subject to customer's appeal rights, and provide for inspection and testing of the same in conformance with the provisions of this Title. The inspections set forth in this section shall be made by the Superintendent at the expense of the City; except in the event of a customer's appeal of the type of device required in which case the City may or may not have additional costs toward an independent inspection. (Ord. 381, §5.2, 1986)

3.48.130 Existing Undeclared Cross-Connections. Any customer whose property contains a cross-connection and who fails to notify and allow Superintendent to inspect the same, shall be deemed in violation of this Title and when such a cross-connection becomes known, the Superintendent shall immediately discontinue service to such customer's premises until the customer has complied with the provisions of Section 3.48.120 of this Title. (Ord. 381, §5.3, 1986)

3.48.140 Penalties. Any person violating any of the provisions of these Rules and Regulations shall, upon conviction thereof, be punished by a fine of not more than \$250, for each offense. Each day the violation shall continue shall constitute a separate offense.

In addition to any other penalties that may be provided by law, any customer who fails to install or provide for the testing of a backflow prevention assembly or who violates any provisions contained herein, or who fails to comply with an order thereunder, shall suffer immediate termination of public water service. (Ord. 348, §20.0, 1984; Ord. 381, §8.0, 1986)