

#### **ORDINANCE NO. 2000 - 1107**

# AN ORDINANCE ADOPTING AND ESTABLISHING A CROSS-CONNECTION AND BACKFLOW PROGRAM AND DECLARING AN EMERGENCY

WHEREAS, the City of Sherwood ("City") owns its municipal water system and desires to have high quality and service levels for its citizens, businesses, and all its customers; and,

WHEREAS, the connections to the City water system are a vital part of protecting the public, these connections must be approved, tested, and inspected on a regular basis; and,

WHEREAS, to protect the public potable water supply of the City from possible contamination or pollution, it is necessary to isolate the consumer's internal distribution system or the consumer's private water system(s) where such contaminants or pollutants could backflow into the public water systems; and,

WHEREAS, to promote the elimination or control of existing cross-connections, actual or potential between the consumer's in-plant potable water system(s) and non-potable water system plumbing fixtures and industrial piping systems; and,

WHEREAS, to provide for the maintenance of a continuing Program of Cross-Connection Control which will systematically and effectively prevent the contamination or pollution of the potable water systems; and,

WHEREAS, the Federal Government has authorized the State of Oregon Health Division of the Department of Human Resources to administer the Federal Safe Drinking Water Act (SDWA) in this state, and the State in turn has authorized water purveyors to administer the SDWA within their boundaries, subject to certain minimum standards contained in the Oregon Administrative Rules; and,

WHEREAS, part of the Federal Safe Drinking Water Act and State Administrative Rules requires all water purveyors to undertake a program for controlling and eliminating cross-connections, a City of Sherwood Ordinance is necessary to clarify the requirements of the City's cross-connection control program and to make it consistent with the recent amendments to the State Administrative Rules. and,

WHEREAS, the City has entered into an agreement with the Tualatin Valley Water District (TVWD) whereby TVWD has responsibility for the operation and maintenance of the City water system including the implementation of this Ordinance for the City; and,

WHEREAS, TVWD Water System Standards have been adopted for the City water system which include those for Cross Connection Control and Backflow Assemblies.

### Section 1. Definitions

- "Water System" shall be considered as made up of two parts: the City System, as operated and maintained by TVWD, and the User's System.
- 1.2 "City System" shall consist of the source facilities and the distribution system; and shall include all those facilities of the water system under the complete control of TVWD, up to the point where the User's system begins.
- 1.3 "Source" shall include all components of the facilities utilized in the production, treatment, storage, and delivery of water to the distribution system.
- 1.4 "Distribution System" shall include the network of conduits used for the delivery of water from the source to the User's system.
- "User's System" shall include those parts of the facilities beyond the termination of the City distribution system (domestic and irrigation systems start immediately behind the water meter; fire line system starts with the valve immediately off the main water system line), which are utilized in conveying potable water to points of use.
- "User," for the purposes of this Ordinance, shall include the terms "owner," "customer," and "consumer."

# Section 2 Prohibitions and Conditions

- 2.1 No water service connection to any premise shall be installed or maintained by TVWD unless the water supply is approved by TVWD and is protected as required by the Oregon Administrative Rules 333-61-0070 and this Ordinance. Service of water to any premise shall be discontinued by TVWD if a backflow prevention assembly required by OAR 333-61-0070 and this Ordinance is not installed, tested and maintained, or if it is found that a backflow prevention assembly has been removed, bypassed, or if an unprotected cross-connection exists on the premise. Service will not be restored until such conditions or defects are corrected.
- User's facilities shall be open for inspection at all reasonable times to authorized TVWD representatives to determine whether unprotected cross-connections or violations of this Ordinance exist. If such violation becomes known, TVWD shall deny or immediately discontinue service to the premises by providing for a physical break in the service line until the User has corrected the condition(s) in conformance with the Oregon State Administrative Rule 333-61-0070 and this Ordinance.
- User or the owner of any premises obtaining water from TVWD who treats the water in any way or adds any chemical or substance to the water shall notify TVWD.
- 2.4 An approved backflow prevention assembly shall be installed on each service line to User'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:

- 2.4.1 There is an auxiliary water supply which is, or can be, connected to the potable water piping;
- 2.4.2 There is piping for conveying liquids other than potable water, and where that piping is under pressure and installed in proximity to potable water piping;
- 2.4.3 There is intricate plumbing which makes it impractical to ascertain whether or not a cross-connection exists;
- 2.4.4 There is a pipeline one and a half inches (1.5") or larger internal diameter supplying public water to the premises;
- 2.4.5 There is a structure more than thirty feet (30') in height (as measured between the highest peak of that structure and the elevation of the service at the public water main to those premises) and the pipeline supplying water to that structure is one and a half inches (1.5") or less internal diameter.
- 2.4.6 There is a risk of back siphoning or back pressure;
- 2.4.7 There is a cross-connection or a potential cross-connection;
- 2.4.8 There is an irrigation/sprinkler system;
- 2.4.9 The owner of a mobile apparatus to which the City supplies water shall provide for backflow prevention by installing a backflow prevention device assembly or provide an approved air gap separation on the mobile apparatus;
- 2.4.10 When there is a standby fire line/sprinkler system using piping material that is not approved for potable water use and/or which does not provide for periodic flow through the line during each 24-hour period a double check detector assembly ("DCDA") will be the minimum protection required. In addition,
  - 2.4.10.1 Any system with provisions for adding foamite or toxic fire retardants whether directly connected or not will require a reduced pressure principle detector assembly ("RPDA") at the property line.
  - 2.4.10.2 Any system connected to or with provisions for connecting to an unapproved auxiliary water supply will require a RPDA at the property line.
  - 2.4.10.3 Any system that utilizes toxic antifreeze will require a RPDA on the anti-freeze loop or a RPDA at the property line.

- 2.4.10.4 Any system that utilizes a Federal Food and Drug Administration accepted antifreeze will require a RPDA on the antifreeze loop.
- 2.4.10.5 Any system with private fire hydrants will require DCDA at the property line.
- 2.4.11 The type of backflow prevention required under Section 2.2.4 shall be at least commensurate with the degree of hazard which exists:
  - 2.4.11.1 An approved air gap of at least twice the inside diameter, but not less than one inch, of the incoming supply line measured vertically above the top rim of the vessel, or an approved reduced pressure backflow device ("RPBD") assembly shall be installed when the substance which could backflow is hazardous to health, such as but not limited to, sewage treatment plants, sewage pumping stations, chemical manufacturing plants, plating plants, hospitals, mortuaries, car washes, and medical clinics;
  - 2.4.11.2 An approved double check valve assembly ("DCVA") shall be installed when the substance which could backflow is objectionable but does not pose an unreasonable risk to health.
  - 2.4.11.3 An approved pressure vacuum breaker or an atmospheric vacuum breaker shall be installed when the substance which could backflow is objectionable but does not pose an unreasonable risk to health and where there is no possibility of backpressure in the downstream piping. A shutoff valve may be installed on the line downstream of a pressure vacuum breaker but shall not be installed downstream of an atmospheric vacuum breaker.
- 2.4.12 All backflow prevention device assemblies required under this section shall be of a type and model approved by the Oregon State Health Division and installed as per Oregon Administrative Rule 333-61-0071 and TVWD backflow standards.
  - 2.4.12.1 All water meters which are for irrigation purposes only shall be installed with an approved backflow prevention assembly by the user at the user's expense. These meters shall be locked upon installation. The locks shall not be removed until the approved backflow assembly has been installed properly and the TVWD cross-connection control inspector has inspected and approved the installation.

- 2.4.13 Backflow prevention device assemblies installed before the effective date of this Ordinance shall be permitted to remain in service if:
  - 2.4.13.1 They were approved at the time of installation but are not on the current list of approved devices;
  - 2.4.13.2 They are properly maintained;
  - 2.4.13.3 They are commensurate with the degree of hazard;
  - 2.4.13.4 They are tested annually and perform satisfactorily.

When devices of this type are moved, or require more than minimum maintenance or are on services which have been modified, changed or remodeled, they shall be replaced by device assemblies which are on the Oregon State Health Division approved list.

# Section 3 Testing

- 3.1 The User or owner of the premises where one or more backflow prevention devices are installed shall cause a test of the device(s) to be performed by an Oregon State Health Division certified tester:
  - 3.1.1 At the time of installation or prior to water service being turned on;
  - 3.1.2 Immediately thereafter, if the device is moved or repaired;
  - 3.1.3 Annually;
  - 3.1.4 Unless otherwise provided, the owner of a mobile apparatus on which a backflow prevention device assembly or air gap separation is required shall cause a test of the assembly or an inspection of the air gap separation to be performed;
  - 3.1.5 Within the year before use in the City and annually thereafter.
- 3.2 TVWD may require more frequent testing of backflow prevention assembly devices if the assembly is installed at a facility that poses an extreme health risk or if the device fails repeatedly.

- 3.3 All completed backflow test reports must be forwarded to TVWD within ten (10) working days from the date of the test:
  - 3.3.1 If the test results indicate that the device is working properly the results shall be entered in TVWD records as such.
  - 3.3.2 If the test results indicate that the device is <u>not</u> working properly the device must be repaired immediately and re-tested and the test results forwarded to TVWD within ten (10) working days.
  - 3.3.3 If, for some reason, a device fails a test and repair is not immediately possible, TVWD must be notified immediately of the failure, location of the failed device and estimated time of repairs.
  - 3.3.4 If TVWD has not received the results of a test required to be performed, it may order a test and add the cost of the test on to the User's water biil, or turn the water off to the premises.
  - 3.3.5 If the User or owner of a backflow device fails to make repairs on a failed backflow device within ten days of a test showing the device is not operating properly, TVWD may order the repair and retest and add the cost of the repair and retest to the User'/Owner's water bill, or TVWD may turn the water off to the premises.
  - 3.3.6 TVWD may discontinue the water service of any person who refuses or fails to pay for charges added to the water bill per items 3.3.4 and 3.3.5 of this section.
- 3.4 Oregon State Health Division certified testers who wish to have their names listed on the TVWD partial list of State Certified Testers, which is mailed with Device Test Notices, must comply with the TVWD standards.

### Section 4 Violation/Remedies

Violation of this ordinance shall be punishable by a fine of \$500 per day for each day of violation. In addition to said fine, TVWD may obtain injunctive or equitable relief to abate the violation, including termination of water service as a violation of this ordinance.

#### Section 5 Miscellaneous

### 5.1 Severability

If any portion of this Ordinance is found invalid by a court of competent jurisdiction, the remaining sections of said Ordinance shall be unaffected thereby.

# 5.2 Fees

By resolution, the City may adopt such fees as it deems appropriate for inspection, testing, shutoff, abatement, or other services provided under this Ordinance.

# 5.3 Policy and Procedures

By resolution, the City may adopt and amend the implementing policies for this Ordinance to be carried out by TVWD.

# NOW, THEREFORE, THE CITY OF SHERWOOD ORDAINS AS FOLLOWS:

- 1. Sections 13.04.150 A and D of the City of Sherwood Municipal Code is hereby repealed.
- 2. The Ordinance 2000-1107, "Adopting and Establishing a Cross-connection and Backflow Program" is hereby adopted.
- 3. The TVWD water system standards applying thereto are also adopted.
- 4. An emergency could arise at any time and an organization as well as appropriate plans for providing emergency operations are necessary for the peace, health, safety, and welfare of the people of Sherwood, and therefore an emergency is hereby declared to exist and this ordinance shall become effective upon its adoption by the Council.

DULY PASSED BY THE CITY COUNCIL THIS 12TH DAY OF DECEMBER 2000.

Walt Hitchcock, Mayor

ATTEST:

C.L. Wiley, City Recorder