

Section 3-21. Cross-Connections and Backflow Protection

(1) No cross-connections with other water supplies shall exist or be installed, located, maintained or operated that could permit the flow of water or other liquids, mixtures, gases or other substances from the consumer's premises into the Department's water system.

(2) It is unlawful for any person to make, maintain, or cause temporarily or permanently, any cross-connection that has a potential for backflow between their plumbing pipes or water fixtures and the Department's water system. Existing cross-connections between the Department's water system and any auxiliary water supply shall be eliminated or protected by means of an approved backflow prevention assembly. Cross-connection control and backflow prevention requirements for facilities and/or premises shall be in accordance to the Department's Standards. The following conditions shall be adhered to:

(a) The Department shall require the consumer to install an approved backflow prevention assembly at his own expense for continued service or before a new service will be provided, whenever the consumer has an actual or potential situation for backflow condition within their premises and/or for any reason or cause deemed in the best interest of the Department. The assembly shall be located immediately downstream of the meter.

(b) If there is a need for uninterrupted water service, an additional backflow prevention assembly shall be installed in an approved manner to ensure continued water service whenever inspection, testing and repair procedures is being performed on anyone of these assemblies.

(3) The consumer is solely responsible for the installation, maintenance, testing and repair of his backflow prevention assembly as required by these Rules and Regulations. The Department will not be responsible for any loss or damage incurred by the consumer or owner as a result of non-compliance with the Department's Rules and Regulations.

(4) It is the responsibility of the consumer/owner to maintain all backflow prevention assemblies on the consumer's premises in good working order. No piping or other arrangement for the purpose of bypassing backflow prevention assemblies shall be permitted. Upon request by the Department, the consumer shall present an affidavit certifying that there are no cross-connections with other water supplies or other physical cross-connections installed, located, maintained or operated that could permit backflow.

(a) The Department shall establish periodic testing and inspection schedules for all backflow prevention assemblies. Intervals between such testing, inspections and overhauls of each assembly shall be established in accordance with the degree of hazard, age and condition of the backflow assembly and the cost to do it shall be the responsibility of the consumer.

The following maintenance requirements shall apply:

I. All backflow prevention assemblies shall be inspected and tested upon initial installation.

2. All backflow prevention assemblies shall be inspected and tested yearly, repaired if necessary, and re-tested before being placed back into service. Wastewater facilities' backflow prevention assemblies shall be inspected and tested every 4 months, repaired if necessary, and re-tested before being placed back into service.

3. A Certified General Tester acceptable to the Department shall perform the inspection and testing. A current list of approved testers will be available upon request by the consumer.

4. Inspections and tests of backflow prevention assemblies may be required at more frequent intervals as required by the Department.

5. Test equipment shall be certified by University of Southern California Foundation for Cross Connection Control and Hydraulic Research, calibrated by the manufacturer every 2 years, and shall maintain a precision of $\pm 5\%$ of the actual reading.

(b) When a backflow prevention assembly fails in service, the consumer/owner shall notify the Department. Repairs are the responsibility of the consumer. A Certified General Tester approved by the Department shall perform the testing. Backflow prevention assembly test forms shall be completed and sent to the Department for confirmation that the device has been properly repaired and functioning as required. Inspection and approval by the Department shall be conducted before the device is put back into operation.

(c) Records of tests, repairs, parts and inspections shall be made on forms prescribed by the Department. The consumer shall furnish a copy of such records to the Department. Failure of the consumer to make the proper tests and submission of records may result in termination of service. The Department has the option to schedule tests, needed repairs, replacements, at the expense of the consumer. Failure to pay for such costs shall be cause for termination of water services.

(d) Conditions relative to the installation and maintenance of cross-connection control and backflow prevention referred to in this section shall be subject to change to meet changing requirements of the State and Federal Health authorities, the County's Building and Plumbing Codes and the Department's Rules & Regulations.

(5) All installations shall conform to the Uniform Plumbing Code and the County of Hawai'i County Code, and the Department's Standards.

(a) Details of the backflow prevention assemblies, showing both plan and elevation views, including size and location of devices, shall be submitted to the Manager for review and approval prior to installation. The backflow prevention assemblies shall be installed on the consumer/owner side of the property line immediately downstream of the water meter. Connections between the meter and the backflow prevention assembly are not permitted. Installation heights shall conform to the Department's Standards.

(b) Backflow assemblies shall be installed above ground unless otherwise approved by the Manager.

(c) The Manager reserves the right to determine the type of backflow prevention installation based on a case-by-case evaluation. In situations where the hazard cannot be readily determined or access is restricted, a Reduced Pressure Principle Assembly or air-gap separation shall be required.

(6) Temporary water meter installations shall require installation of an approved backflow prevention assembly to protect the Department's water system. The following conditions shall apply:

(a) Applications for temporary meter installations shall be made at the Department on appropriate forms provided by the Department. All costs and fees for the installation of the temporary water meter, backflow prevention assembly and water use shall be paid by the consumer.

(b) Applicant shall install a DWS-approved reduced pressure principle backflow preventer. The Department shall inspect the installation and test the applicant's backflow preventer before activating the temporary service. Applicant shall be responsible for the

maintenance, repair and yearly testing of the backflow preventer.

(7) When the Department encounters water uses that represent a clear and immediate hazard to the Department's water supply that cannot be immediately abated, the Department may terminate water service at the premises immediately. A written notice will be given to the consumer after water service termination.

(a) Conditions or water uses that create a basis for immediate water service terminations include, but are not limited to the following:

1. Refusal to install or to test a backflow prevention assembly, or to repair or replace a faulty backflow prevention assembly.

2. Direct or indirect connections between the Department's water system and a sewer line.

3. Unprotected direct or indirect connections between the Department's water system and a system or equipment containing pollutants and/or contaminants.

4. Unprotected direct or indirect connections between the Department's water system and an auxiliary water system.

(b) For all other situations requiring backflow protection where there is no apparent and immediate hazard to the water supply, the Department will terminate water service to a consumer's premises after proper notification has been sent. The termination steps are the following:

1. The consumer will be notified by letter of the Department's intent to terminate water service, allowing 30 calendar days to remedy the situation.

2. If compliance has not been met, a letter to terminate water service will be issued stating that water services will be terminated within five (5) calendar days. Water service will not resume until the corrective action has been completed and approved by the Department.