

ALAN M. ARAKAWA
Mayor



DAVID TAYLOR, P.E.
Director

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PAUL J. MEYER
Deputy Director

DEPARTMENT OF WATER SUPPLY

COUNTY OF MAUI

OFFICE OF THE MAYOR

200 SOUTH HIGH STREET

WAILUKU, MAUI, HAWAII 96793-2155

www.mauewater.org

February 1, 2016

Honorable Alan M. Arakawa
Mayor, County of Maui
200 South High Street
Wailuku, Hawaii 96793

For Transmittal to:

Honorable Mike White, Chair
and Members of the Maui County Council
200 South High Street
Wailuku, Hawaii 96793

APPROVED FOR TRANSMITTAL

Al. Gust 2/4/16
Mayor Date

Dear Chair White and Members:

**SUBJECT: PROPOSED BILL "A BILL FOR AN ORDINANCE AMENDING
CHAPTER 14.04, MAUI COUNTY CODE (MCC), RELATING TO
WATER SERVICES"**

Attached please find the proposed bill entitled, "A BILL FOR AN ORDINANCE AMENDING CHAPTER 14.04, MAUI COUNTY CODE, RELATING TO WATER SERVICES". The purpose of this proposed bill is to add new sections "14.04.070 Cross-connection Control and Backflow Prevention" and "14.04.080 Installation of Fire Water Service" to Chapter 14.04 MCC.

The Department respectfully request that this matter be referred to the appropriate Council committee for expeditious review, discussion and execution.

Thank you for your attention to this matter. Should further clarification be necessary, please contact me at Ext. 7816.

Sincerely,

David Taylor
DAVID TAYLOR, P.E.
Director of Water Supply

Attachments

xc: Paul J. Meyer, Deputy Director

DT:atn

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COUNTY COMMUNICATION NO. 16-40

"By Water All Things Find Life"



ORDINANCE NO. _____

BILL NO. _____ (2016)

A BILL FOR AN ORDINANCE AMENDING CHAPTER 14.04, MAUI COUNTY
CODE, RELATING TO WATER SERVICES

BE IT ORDAINED BY THE PEOPLE OF THE COUNTY OF MAUI:

SECTION 1. Chapter 14.04, Maui County Code, is amended by adding
new sections to be appropriately designated and to read as follows:

"14.04.070 Cross-connection control and backflow prevention. A. Requirement. The department shall require consumers and owners of premises to install a backflow device on all properties connected to the department of water supply system. For purposes of this section, "cross-connection" is defined as any actual or potential connection or structural arrangement between a public or a consumer'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 substance 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.

B. Prohibition of certain connections and installations. In order to provide sanitary protection to the department's water supply and to comply with the applicable statutes, rules, and regulations of the state department of health and the United States Environmental Protection Agency, as adopted or amended from time to time, no cross-connections with other water supplies, or other physical connections shall exist, or be installed, located, maintained, or operated which could permit backflow of contaminated water or any other dangerous, impure, unsanitary, or unpotable substance from the consumer's premises into the department's water supply system, except as provided below:

1. Cross-connections with other water supplies. Owners (or operators) of presently existing water supplies which are in active use and cross-connected to the department's system will be required to perform annual

testing for the continuance of such cross-connection. Annual testing will be required as follows:

a. Where such water supplies are regularly examined by the department, or other agencies satisfactory to the department, meet the requirements of the State's safe drinking water regulations, have no cross-connections which could permit backflow of contaminated water into those water supplies, and are approved by the department, as acceptable, safe and sanitary supplies and continue as such at all times while the connections are in existence.

b. Where such water supplies do not meet the requirements of subsection (a) above, are not normally under pressure, and are maintained solely for firefighting purposes, and, where adequate protection against backflow to the department's system is provided by mechanical or other methods or devices satisfactory to the department.

c. The department may waive the requirement of an annual test and allow cross-connections to be continued or established if the connections are with water supplies defined as primary or community supplies by the state department of health and approved by the department and the state department of health as acceptable, safe and sanitary supplies.

2. Other physical connections. Other physical connections may be permitted if, in the discretion of the director, adequate protection can be provided for the water supply of the department against backflow by the installation of a University of Southern California-approved reduced pressure backflow preventer assembly, an air gap, or other methods or devices approved by the department pursuant to the department's water system standards. Double check backflow preventer assemblies shall not be allowed, except under the approval and sole discretion of the director. The consumer shall install, maintain, and operate the backflow device in a manner satisfactory to the department at all times; provided, however, that the department may require the consumer to eliminate or rearrange designated plumbing or piping connections or fixtures, or to install a backflow device at the meter or other location, subject to the approval of the department, as an added safety measure in addition to any and all other backflow protection required or provided by mechanical or other methods or devices, whenever (1) the consumer is

engaged in the handling of dangerous or corrosive liquids or industrial or process waters, highly contaminated water or sewage, or is engaged in the medical or dental treatment of persons who might have diseases transmittable by water, or whenever (2) in the discretion of the director there exists a danger of backflow into the department's main because of the possibility of unauthorized connections being created through noncompliance or inadvertence on account of the complexity of the system or systems, or because of failure by the consumer to provide adequately qualified personnel and supervision for maintenance and extension of the consumer's piping system or systems, or for any other reason or cause deemed sufficient in the director's discretion.

C. Separate pressure system. The department shall require the installation of mechanical or other methods or devices on the consumer's side of the meter to prevent backflow whenever the consumer maintains a separate pressure system or a separate storage facility, or in any way increases the pressures of the water within the consumer's premises above the pressure furnished by the department, or has such equipment devices or arrangement of piping, storage or industrial methods or processes that might under certain conditions raise the pressure of the water within the consumer's premises above the pressure of the water in the mains of the department. Plans for such installation must be approved by the department.

D. Pressure regulation required of consumer. To protect the consumer's plumbing system, a suitable pressure relief valve must be installed and maintained by the consumer at the consumer's expense when backflow devices are installed on the consumer's side of the meter.

E. Location and inspection of protective devices. Any device installed for the prevention of backflow, as herein required, shall be located above ground and in such a manner as to be safe from flooding or submergence in water or other liquids, properly protected from external damage, freely accessible, and with adequate working room for inspections, testing and repairing.

All such devices shall be tested by the owner not less than once annually, and as often as required by the department in those instances where successive tests indicate repeated failure. Repairs, replacements of parts, or other needed remedies, shall be made immediately and whenever deemed necessary by the department at the expense of the consumer. Making of tests and annual inspections shall be the responsibility of the consumer and shall be performed by a qualified person or persons in accordance with methods acceptable to the department. The person or

persons making the tests and inspections shall be a certified tester approved by the department. Records of all tests and inspections shall be made on forms prescribed by the department and a copy of such records shall be furnished to the department within five working days of any such test or inspection. Failure of the consumer to make the proper tests and submission of records may, at the discretion of the director, result in the department's making the tests, needed repairs, and replacements, and charging the costs thereof to the consumer.

F. Conformance with laws and ordinances. The conditions relative to the installation and maintenance of cross-connections and other physical connections referred to in this section shall be subject to change to meet changing requirements of the state and federal health and environmental statutes, rules, regulations or other authorities, and of the building code of the County.

G. Building permits.

1. Consumers who are required to install a backflow device as a condition of building permit approval shall complete the installation prior to the department's approval of the building permit application.

2. The department shall require the installation of backflow preventers during its review of any building permit application and during any other review by the department.

3. The department shall require consumers to upgrade existing single detector check assemblies to double check detector assemblies.

4. Construction agreement and bond. To secure approval of a building permit application prior to the construction of the backflow device, the consumer, and the owner or owners of the premises if the consumer does not own the premises, shall enter into an agreement with the department to make, install, and complete the installation of the backflow device within a specified time and file with the department a surety bond or other security acceptable to the department, to assure the department the actual installation of the backflow device shown on the approved construction plans. Consumer shall also agree not to occupy any structure until the backflow device is installed and operational.

The agreement shall specify that the consumer will complete the installation of the backflow device to the satisfaction of the department, shall provide that if the consumer fails to complete such work within the time specified, or such extension as may be mutually agreed upon, the department may complete the same and recover

the full cost and expense thereof from the consumer, and shall specify that the consumer shall allow department staff to enter the premises to construct said backflow device assembly.

The bond or other security to be filed with the department with the aforesaid agreement shall be one of the following (provided, that in all instances where a surety bond is filed, it shall be executed by the consumer and owner of the premises, as principal, and by a surety company authorized to transact a surety business in the State, as surety):

a. A surety bond in a sum equal to the cost of the work required to be done plus fifty percent as estimated by the director; payable to the department, and conditioned upon the faithful performance of all work required to be done by the consumer, and upon the further condition that should the consumer fail to complete all work required to be done within a specified time, the department may cause all work which is not finished to be completed, and the parties executing the bond shall be firmly bound for the payment of all costs therefor; or

b. The consumer shall make a deposit of money with the director in an amount equal to the cost of the construction of said improvements plus fifty percent as estimated by the director.

c. In lieu of said surety bond or deposit in escrow mentioned in subsections (a) and (b) above, the consumer may deposit with the director bonds or other negotiable securities acceptable to the director in the amount provided by subsections (a) and (b), respectively, of this section.

H. Civil penalty and discontinuance of water service for non-compliance. Consumers who fail to comply with the department's requirements shall pay a civil fine of \$500 per day for each day in which such non-compliance persists. Failure on the part of the consumer to comply with the department's requirements relative to cross-connections and backflow protection within 30 days of notice from the department to install said backflow preventer assembly will be sufficient reason for discontinuing water service until such time as the requirements have been met.

I. The department shall require the installation of a backflow preventer assembly at any time it deems said backflow preventer assembly necessary to provide sanitary protection to the department's water supply.

J. Exemption. The director, at his or her discretion, may waive the requirement for consumers to install a backflow device.

14.04.080 Installation of fire water service. A. Water used from fire water service connections shall be used only for fire protection purposes. Fire water service will be furnished only where adequate provision is made to prevent diversion of water through such service for other purposes. The fire water service connection will be installed as agreed upon between the department and consumer and shall be paid for by the consumer in accordance with the provisions for the installation of new water services. After the water is turned on, the department assumes no liability for loss or damage of any kind whatsoever that may occur to the premises served, regardless of cause.

B. No charge will be made for water used through such connection for fire protection purposes, but any water lost through leakage or used in violation of the conditions contained herein shall be paid for by the consumer at the regular schedule of fire water service rates and charges. The department may, without giving notice, disconnect, and remove the said fire water service if water is used for other than fire protection purposes, or if leaks are not corrected. Whenever such disconnection is in effect, the department shall not be held in any way liable for loss or damage sustained due to the disconnection of service.

C. Fire water service rates will be in accordance with the rates established by the annual budget.

D. All fire water services shall be metered with a detector check valve and a bypass meter of the type approved by the department. The detector check valve is for backflow prevention purposes. The meter required shall be approved by the department. The consumer shall pay for all materials and the installation of meter, detector check valve, concrete box, and appurtenances. The service consisting of the check detector assembly, manhole, thrust beam, and appurtenances in the consumer's private property shall remain the property of the consumer.

E. Such fire water service devices shall be maintained by the consumer. The department shall be provided access for periodic inspection and testing of such devices.

F. Any device installed for the prevention of backflow, as may be required under this code, shall be properly protected from external damage, freely accessible, and with adequate working room for inspections, testing and repairing. All such devices shall be tested by the owner not less than once annually, and as often as required by the department in those instances where a test result indicates a failure. Repairs, replacement of parts, or other

needed remedies, shall be made immediately and whenever deemed necessary by the department at the expense of the consumer. The conducting of tests and annual inspections shall be the responsibility of the consumer and shall be performed by a qualified person or persons in accordance with methods acceptable to the department. The person or persons conducting the tests and inspections shall be a certified tester approved by the department. Records of all tests and inspections shall be made on forms prescribed by the department and a copy of such records shall be furnished to the department within five working days of any such test or inspection. Failure of the consumer to complete the proper tests and submission of records may, at the discretion of the director, result in the department's conducting the tests, needed repairs, and replacements, and charging any resulting and related costs thereof to the consumer.

G. Civil penalty and discontinuance of water service for non-compliance. Consumers who fail to comply with the department's requirements shall pay a civil fine of \$500 per day for each day in which such non-compliance persists. Failure on the part of the consumer to comply with the department's requirements within 30 days of notice from the department will be sufficient reason for discontinuing water service until such time as the requirements have been met."

SECTION 2. New material is underscored. In printing this bill, the County Clerk need not include the underscoring.

SECTION 3. This ordinance shall take effect upon its approval.

APPROVED AS TO FORM
AND LEGALITY:

JENNIFER M. P. E. OANA
Deputy Corporation Counsel
County of Maui