## DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

# Rules Amending Title 3 Hawaii Administrative Rules

1. Chapter 183 of Title 3, Hawaii Administrative Rules, entitled "State Plumbing Code", is amended and compiled to read as follows:

## "HAWAII ADMINISTRATIVE RULES

## TITLE 3

#### DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

## SUBTITLE 14

## STATE BUILDING CODE COUNCIL

#### CHAPTER 183

#### STATE PLUMBING CODE

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	Code.
§3-183-5	Permit Authorization
Subchapter 2	Amendments to the 2012 IAPMO Uniform Plumbing Code
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§3-183-12	Storm Drainage

§3-183-13	Alternate Water Sources for Non-
	potable Applications
§3-183-14	Repealed
§3-183-15	Reference Standards

<u>Historical Note</u>: This chapter 183 effective subtitle 14 of title 3, Hawaii Administrative Rules replaces Hawaii Administrative Rules effective 4/16/10 (file no. 2917):

- 1. Amends section 3-183-4
- 2. Amends Subchapter 2
- 3. Amends section 3-183-6
- 4. Adds a new section 3-183-6.1
- 5. Amends section 3-183-7
- 6. Amends section 3-183-8 by adding subsection 301.2, replaces subsection 314.8 with subsection 313.8
- 7. Amends section 3-183-9 by replacing subsection 412.0 with subsection 422.0
- 8. Adds a new section 3-183-9.1 and subsection 604.11
- 9. Repeals section 3-183-11
- 10. Amends section 3-183-13 by repealing subsections 1601.0 (A), 1601.0 (D), 1601.0 (E), 1604.0 (A), 1607.0, 1608.0, 1611.0, 1612.0 (A), 1614.0 and replacing subsection 1603.0 with 1601.3 and subsection 1604.0 with subsection 1602.7
- 11. Repeals section 3-183-14
- 12. Adds a new section 3-183-15

# SUBCHAPTER 1 RULES OF GENERAL APPLICABILITY

§3-183-1 Purpose. The purpose of this chapter is to adopt the state plumbing code as required by Section 107-25, Hawaii Revised Statutes (HRS). [Eff 4/16/10; comp ]

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

§3-183-2 Scope. This chapter sets forth minimum requirements for the design, installation, alteration, repair, and construction of plumbing and drainage systems, and shall apply to all new construction, relocation, alteration, repair or reconstruction. [Eff 4/16/10; comp ] (Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

§3-183-3 Definitions. In this chapter, unless the context otherwise requires:

"Chapter" means chapter of this HAR Chapter 3-183.

"IAPMO" means the International Association of Plumbing and Mechanical Officials.

"UPC" means the Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials.

"Section" means a section of a chapter of the Uniform Plumbing Code.

[Eff 4/16/10; comp

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

# §3-183-4 Adoption of the Uniform Plumbing Code.

The "Uniform Plumbing Code, [2006] 2012 Edition" including [all] appendices A, B, C, G and I as copyrighted and published by International Association of Plumbing and Mechanical Officials, 5001 East Philadelphia Street, Ontario, CA 91761-2816 is incorporated by reference and made a part of this chapter. This incorporation by reference includes all parts of the Uniform Plumbing Code subject to the amendments hereinafter set forth. ]

[Eff 4/16/10; am and comp

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§3-183-5 Permit Authorization. Each county may, by ordinance, require that a permit be obtained from the building official for any area regulated by this chapter. [Eff 4/16/10; comp ]
(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

#### SUBCHAPTER 2

AMENDMENTS TO THE [2006]  $\underline{2012}$  IAPMO UNIFORM PLUMBING CODE

## §3-183-6 Title.

101.1 Title. This document shall be known as the ["Uniform Plumbing Code" of the State of Hawaii] State of Hawaii Plumbing Code, and may be cited as such, and will be referred to herein as "this code".

[Eff 4/16/10; am and comp (Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

# §3-183-6.1 Organization and Enforcement.

102 Organization and Enforcement. In accordance to HRS107 the provisions of this code are State standards and are enforced when adopted by the counties or as an interim code if the counties fail to adopt. Provisions for licensing of design professionals and any person to perform plumbing work shall be in accordance to HRS444, 448E and 464.

[Eff and comp

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

#### §3-183-7 Definitions.

204.0 -B-

Building Drain - That part of the lowest piping of a drainage system that receives the discharge from soil, waste, and other drainage pipes inside the walls of buildings and conveys it to the building sewer beginning five (5) feet (1524 mm) outside the building wall.

[Eff 4/16/10; comp (Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

#### 210.0 -H-

Health Officer - Health Officer shall mean the director of health of the department of health, State of Hawaii, or the director's authorized agent." [Eff 4/16/10; comp (Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

#### 221.0 -s-

Single Stack Vent System - A specially designed plumbing system wherein a common stack serves as a [a] drainage pipe as well as a vent pipe.

[Eff 4/16/10; am and comp ]

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

## §3-183-8 General Regulations.

301.2 The use of the International Plumbing Code may be used in lieu of the Uniform Plumbing Code when approved by the administrative authority. A written request by a Hawaii licensed mechanical engineer with the concurrence of the building or project owner must be made to the administrative authority. The details of this approval shall be recorded and entered in the files of the department. Plans submitted shall be stamped by the Hawaii licensed mechanical engineer. This section shall only apply to a new building or project and shall not be applied in conjunction with an existing building. Provisions of the Uniform Plumbing Code and the International Plumbing Code shall not be combined or interchanged unless approved by the administrative authority. Plans submitted shall clearly state on the submitted title, plumbing and/or mechanical sheets that the International Plumbing Code was used as the basis of design. ]

[Eff and comp (Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

[314.8]  $\underline{313.8}$  Seismic supports. Where earthquake loads are applicable in a accordance with the building code, plumbing piping supports shall be designed and installed for the seismic forces in accordance with the building code.

[Eff 4/16/10; am and comp ]
(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

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# §3-183-9 Plumbing Fixtures and Fixture Fittings. [412.0] 422.0 Minimum Number of Required Fixtures.

Plumbing fixtures shall be provided for the type of building occupancy and in the minimum number required in Chapter 29 of the International Building Code.

[Eff 4/16/10 am and comp

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

## §3-183-9.1 Materials.

604.11 Lead Content. The maximum allowable lead content in pipes, pipe fittings, plumbing fittings, and fixtures intended to convey or dispense water for human consumption shall be not more than a weighted average of 0.25 percent with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures. For solder and flux, the lead content shall be not more than 0.2 percent where used in piping systems that convey or dispense water for human consumption.

## Exceptions:

- (1) Pipes, pipe fittings, plumbing fittings, fixtures or backflow preventers used for nonpotable services such as manufacturing, industrical processing, irrigation, outdoor watering, or any other uses where the water is not used for human consumption.
- (2) Water closets, bidets, urinals, fill valves,
  flushometer valves, tub fillers, shower
  valves, service saddles, or water distribution
  main gate valves that are 2 inches (50 mm) in
  diameter or larger.

[Eff and comp (Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

#### §3-183-10 Sanitary Drainage.

715.1 The building sewer, beginning five (5) feet (1524 mm) from any building or structure shall be of such materials as prescribed in this code. [Eff 4/16/10 comp

## [§3-183-11 Vents.

911.0 Single Stack System. When approved by the administrative authority, a single-stack system based on engineered studies and tests may be used in lieu of other related provisions in this code. Plans and specifications of such systems shall be prepared and stamped by a Hawaii licensed mechanical engineer.]
[Eff 4/16/10; R ]
(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)]

§3-183-12 Storm Drainage. Section 1101.11.1 is amended to read as follows:

# §3-183-13 [Gray Water Systems - General] <u>Alternate</u> Water Sources for Non-potable Applications

[1601.0 (A) The provisions of this chapter shall apply to the construction, alteration, and repair of gray water systems for underground landscape irrigation. Installations shall be allowed only in single-family dwellings or as allowed by the authority having jurisdiction. The system shall have no connection to any potable water system and shall not result in any surfacing of the gray water. Except as otherwise provided for in this chapter, the provisions of this code shall be applicable to gray water installation.]

[Eff 4/16/10; R

[1601.0 (D) No permit or approval for any gray water system shall be issued until a plot plan with appropriate data or design plans satisfactory to the authority having jurisdiction has been submitted and approved for use. When there is insufficient lot area or inappropriate soil conditions for adequate absorption of the gray water, as determined by the authority having jurisdiction, no gray water system shall be permitted.]

[Eff 4/16/10; R 1

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

[1601.0 (E) No permit or approval shall be issued for a gray water system on any property in a geologically sensitive area as determined by the authority having jurisdiction.] [Eff 4/16/10; R 1

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

# [1603.0] 1601.3 Permit or Approval

It shall be unlawful for any person to construct, install, or alter, or cause to be constructed, installed, or altered any [gray water] alternate water source system in a building or on a premises without first obtaining a permit or approval to do such work from the authority having jurisdiction. ]

[Eff 4/16/10; am and comp

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

# [1604.0] 1602.7 Drawings and Specifications.

The authority having jurisdiction may require any or all of the following information to be included with or in the plot plan before a permit or approval is issued for a gray water system, or at any time during the construction thereof:

[Eff 4/16/10; am and comp (Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

[1604.0 (A) Plot plan drawn to scale and completely dimensioned, showing lot lines and structures, direction and approximate slope of surface, location of all present or proposed retaining walls, drainage channels, water supply lines, wells, paved areas and structures on the plot, number of bedrooms and plumbing fixtures in each structure, location of

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private sewage disposal system or building sewer connecting to the public sewer, and location of the proposed gray water system.]

[Eff 4/16/10; R

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

# [1607.0 Required Area of Subsurface Irrigation/Disposal Fields (See Figure 16-5.)

The authority having jurisdiction may require that each valved zone shall have a minimum effective irrigation area in square feet as determined by Table 16-2 for the type of soil found in the excavation, based upon a calculation of estimated gray water discharge pursuant to Section 1606.0 of this chapter, or the size of the holding tank, whichever is larger. The area of the irrigation/disposal field shall be equal to the aggregate length of the perforated pipe sections within the valved zone multiplied the width of the proposed irrigation/ disposal field. Each proposed gray water system shall include at least three (3) valved zones, and each zone shall be in compliance with the provisions of the section. No excavation for an irrigation/disposal field shall extend within three (3) vertical feet of the highest known seasonal ground-water, nor to a depth where gray water may contaminate the groundwater or ocean water. The applicant shall supply evidence of groundwater depth to the satisfaction of the authority having jurisdiction.] [Eff 4/16/10; R ]

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

# [1608.0 Determination of Maximum Absorption Capacity.

- Wherever practicable, irrigation/disposal field size shall be computed from Table 16-2 and Table 16-3, or Water Demand based on Evapotranspiration (ET) data.
- (B) In order to determine the absorption quantities of questionable soils other than those listed in Tables 16-2 and 16-3, the proposed site may be subjected to percolation tests acceptable to the authority having jurisdiction.

- (C) When a percolation test is required, no gray water system shall be permitted if the test shows the absorption capacity of the soil\_is not acceptable as determined by the authority having jurisdiction or is less than eighty-three hundredths (0.83) gallons per square foot (33.8  $\text{L/m}^2$ ) or more than five and twelve hundredths (5.12) gallons per square foot (208.5  $\text{L/m}^2$ ) of leaching area per twenty-four hours.
- (D) The following formula can be used to estimate the square footage of landscape to be irrigated based on ET data:

$$LA = GW$$
ET x PF x 0.62

Where: GW = estimated gray water produced (gallons per week)

LA = landscaped area (ft<sup>2</sup>)

ET = evapotranspiration (inches per week)
PF = plant factor, based on climate and type
of plants

 $0.6\overline{2}$  = conversion factor (from inches of ET to gallons per week)]

[Eff 4/16/10; R ]
(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

# [1611.0 Irrigation/Disposal Field Construction. (See Figure 16-5.)

The authority having jurisdiction may permit subsurface drip irrigation, mini-leach field or other equivalent irrigation methods which discharge gray water in a manner which ensures that the gray water does not surface. Design Standards for subsurface drip irrigation systems and mini-leach field irrigation systems are as follows:

- (A) Standards for a subsurface drip irrigation system:
- (1) Minimum 140 mesh (115 micron) filter with a capacity of 25 gallons per minute, or equivalent, filtration, sized appropriately to maintain the filtration rate, shall be used. The filter back-wash and flush discharge shall be caught, contained and disposed of to the sewer system, septic tank, or with approval of the authority having jurisdiction, a separate mini-leach field sized to accept all the back

wash and flush discharge water. Filter backwash water and flush water shall not be used for any purpose. Sanitary procedures shall be followed when handling filter back-wash and flush discharge of gray water.

- (2) Emitters shall have a minimum flow path of 1200 microns and shall have a coefficient of manufacturing variation (Cv) of no more than seven percent. Irrigation system design shall be such that the emitter flow variation shall not exceed plus or minus ten percent. Emitters shall be recommended by the manufacture for subsurface use and gray water use, and shall have demonstrated resistance to root intrusion.
- (3) Each irrigation zone shall be designed to include no less than the number of emitters specified in Table 16-3, or through a procedure designated by the authority having jurisdiction. Minimum spacing between emitters is 14 inches in any direction.
- (4) The system design shall provide user controls, such as valves, switches, timers, and other controllers as appropriate, to rotate the distribution of gray water between irrigation zones.
- (5) All drip irrigation supply lines shall be polyethylene tubing or PVC class 200 pipe or better and schedule 40 fittings. All joints shall be properly solvent-cemented, inspected and pressure tested at 40 psi, and shown to be drip tight for five minutes, before burial. All supply lines will be buried at least eight inches deep. Drip feeder lines can be poly or flexible PVC tubing and shall be covered to a minimum depth of nine inches.
- (6) Where pressure at the discharge side of the pump exceeds 20 pounds per square inch (psi), a pressure reducing valve able to maintain downstream pressure no greater than 20 psi shall be installed downstream from the pump and before any emission device.
- (7) Each irrigation zone shall include a flush valve/anti-siphon valve to prevent back siphonage of water and soil.
  - (B) Standards for a mini-leach field system:
- (1) Perforated sections shall be a minimum three (3) inch (80 mm) diameter and shall be constructed of perforated high-density polyethylene pipe, perforated

ABS pipe, perforated pvc pipe, or other approved materials, provided that sufficient openings are available for distribution of the gray water in to the trench area. Material, construction, and perforation of the pipe shall be in compliance with the appropriate absorption fields drainage piping standards and shall be approved by the authority having jurisdiction.

(2) Filter material, clean stone, gravel, slag, or similar filter material acceptable to the authority having jurisdiction, varying in size from three quarter (3/4) inch (20 mm) to two and one-half (2-1/2)inch (65 mm) shall be placed in the trench to the depth and grade required by this section. The perforated section shall be laid on the filter material in an approved manner. The perforated section shall then be covered with filter material to the minimum depth required by this section. The filter material shall then be covered with untreated building paper, straw, or similar porous material to prevent closure of voids with earth backfill. No earth backfill shall be placed over the filter material cover until after inspection and acceptance.] 1

[Eff 4/16/10; R (Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

[1612.0 (A) Other collection and distribution systems such as laundry only gray water systems may be approved by the local authority having jurisdiction.]
[Eff 4/16/10; R ]
(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

[Table 16-1 Location of Gray Water Systems

Minimum Horizontal Distance in Required From:	reet		Irrigat Disposa Feet	tion/ al Field (mm)
Building structures <sup>1</sup> Property line adjoining	5 <sup>2</sup>	(1,524 mm0)	5	(1,524 mm)
private property	5	(1,524mm)	5	(1,524mm)
Water supply wells <sup>4</sup>	550	(15,240mm)	1000	(304,800 mm)
Streams and lakes <sup>4</sup>	(50	(15,240 mm)	50 <sup>5</sup>	(15,240 mm)
Sewage pits or cesspools	5	(1,524mm)	5	(1,524mm)
Disposal field	55	(1,524mm)	5	(1,524 mm)
Septic tank	0	(0)	5	(1,524mm)
On-site domestic water				
service line	5	(1,524mm)	5	(1,524mm)
Pressurized public water				
main	10	(3,048 mm)	10 <sup>7</sup>	(3,048 mm)]
[Eff 4/16/10; R (Auth: HRS §107-29)(Im	]			

[Table 16-3 Subsurface Drip Design Criteria for Six Typical Soils

Type of Soil	Maximum Emitt Discharge (gal/	
Sand	1.8	0.6
Sandy loam	1.4	0.7
Loam	1.2	0.9
Clay loam	0.9	1.1
Silty clay	0.6	1.6
Clay	0.5	2.0]
[Eff 4/16/10; (Auth: HRS §1		§107-24, 107-25)

#### [1614.0 Definitions

Reclaimed water is water that, as a result of tertiary treatment of domestic wastewater, is at all times oxidized, then filtered, and then exposed, after the filtration process, to:

- A. A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaqueforming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least resistant to disinfection as polio virus may be used for purposes of demonstration; and
- B. A disinfection process that limits the concentration of fecal coliform bacteria to the following criteria:
- (1) The median density measure in the disinfected effluent does not exceed 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed; and
- (2) The density does exceed 23 per 100 milliliters in more than one sample in any 30-day period; and
- (3) No sample shall exceed 200 per 100 milliliters.

The level of treatment and quality of the reclaimed water shall be approved by the department of health.

Specifically excluded from this definition is gray water, which is defined in Part I of this chapter.

For the purposes of this section, the words "reclaimed" and "recycled" may be used interchangeably.]
[Eff 4/16/10; R

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

# [§3-183-14 Appendix K Private Sewage Disposal Systems:

Construction plans for private sewage disposal systems shall be prepared by or under the supervision of a Hawaii licensed engineer registered in the State of Hawaii. All private sewage disposal systems shall be constructed or modified by a person meeting the requirements of section 444, Hawaii Revised Statutes (HRS) and any pertinent rules promulgated by the

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department of commerce and consumer affairs, State of
Hawaii.l
                                                      ]
 [Eff 4/16/10; R
(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)
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[The lot area shall not be less than 10,000 square feet except for lots created and recorded before August 30, 1991. For lots less than 10,00 square feet which were created and recorded before August 20, 1991, only one private sewage disposal system shall be allowed. The total wastewater flow into one private sewage disposal system shall not exceed one thousand gallons, and one private sewage disposal system shall not serve more than five bedrooms, whether they are in one dwelling unit or two. For buildings, other than dwellings with highly variable wastewater flow rates, such as but not limited to schools, parks, and churches, the private sewage disposal system may exceed a design flow rate of 1,000 gallons per day.] [Eff 4/16/10; R ]

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(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)
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[Aerobic systems shall be required for the direct disposal of sewage to groundwater.] [Eff 4/16/10; R ] (Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

#### [Section K 2 Capacity of Septic Tanks

The liquid capacity of all septic tanks shall conform to Tables K-2 and K-3 as determined by the number of bedrooms in dwelling occupancies and the estimated waste/sewage design flow rate or the number of plumbing fixture units as determined from Table 7-3 of this Code, whichever is greater in other building occupancies. The capacity of any one septic tank and its drainage system shall be limited by the soil structure classification, as specified in Table K-4.] [Eff 4/16/10; R (Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

# [Section K 3 Area of Disposal Fields and Seepage Pits.

The minimum effective absorption area in disposal fields in square feet (m2) of sidewall, shall be predicated on the required septic tank capacity in gallons (liters) and/or estimated waste/sewage flow

rate, whichever is greater, and shall conform to Table K-4 as determined for the type of soil found in the excavation. The minimum effective absorption area could also be based upon a flow of 200 gallons per bedroom per day in accordance with Table K-6. Soil percolation tests shall be conducted at a minimum depth of three feet.]
[Eff 4/16/10; R

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

#### [Section K 4 Percolation Tests.

## [Section K 5 Septic Tank Construction.

The septic tank shall be certified by IAPMO or a third party certification body accredited in accordance with ISO Guide 65, entitled "General Requirements for bodies operating product certification systems.]
[Eff 4/16/10; R

(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

## [Section K 7 Seepage Pits.

Each seepage pit shall be circular in shape and shall have an excavated diameter of not less than six (6) feet (1,829 mm).]
[Eff 4/16/10; R ]
(Auth: HRS §107-29)(Imp: HRS §107-24, 107-25)

## [Table K-1 Location of Sewage Disposal System.

The minimum horizontal distances was revised to be consistent with Hawaii Administrative Rules Chapter 11-62 "Wastewater Systems" distances.

See attached Table K-1, Location of Sewage Disposal Systems, dated April 2009, located at the end of this chapter for changes.

## Table K-2 Capacity of Septic Tanks.

Under column "Single-Family Dwellings-Number of Bedrooms", delete "1 or 2 and 3" and replace with "4 or less".

Under column "Multiple Dwelling Units or Apartments-One Bedroom Each", delete "3 through 10".

Delete entire column "Other Uses: Maximum Fixture Units Served per Table 7-3".

Under column "Gallons", delete "750"; delete "1,200" and replace with "1,250"; delete "1,500 to 3,500"

Under column "Minimum Septic Tank Capacity in (Liters)", delete "7570 through 13,248"; delete "1,200" and replace with "1,250"; delete "1,500 to 3,500"

Delete "\*Note: Extra Bedroom, 150 gallons (568 liters) each. Extra dwelling units over 10: 250 gallons (946 liters) each. Extra fixture units over 100: 25 gallons (95 liters) per fixture unit."

See attached Table K-2, Capacity of Septic Tanks, dated April 2009, located at the end of this chapter for changes.

#### Table K-6 Minimum Required Absorption Area

Table K-6, Minimum Required Absorption Area, dated April 2009, located at the end of this chapter is added.]

# §3-183-15 Referenced Standards

Table 1401.1 is amended by adding between Standard Number SAE-J1670-2008 and TCNA A118-1-2011\* to read:"

Standard Number	Standard Title	Application	Referenced Sections
State of Hawaii - Rev. Sept. 2000	Standard Details for Public Works Construction	Various	Various
State of Hawaii - 2002	Water System Standards	Various	Various

[Eff and comp ]

- 2. Material, except source notes, to be repealed is bracketed. New material is underscored.
- 3. Additions to update source notes to reflect these amendments and compilation are not underscored.
- 4. These amendments to and compilation of Chapter 3-183, Hawaii Administrative Rules, shall take effect ten days after filing with the Office of the Lieutenant Governor.

I certify that the foregoing are copies of the rules, drafted in the Ramseyer format pursuant to the requirements of section 91-4.1, Hawaii Revised Statutes, which were adopted on \_\_\_\_\_\_ by the State Building Council and filed with the Office of the Lieutenant Governor.

TIMOTHY HIU, Chairperson State Building Code Council

DEAN H. SEKI, State Comptroller Department of Accounting and General Services

APPROVED AS TO FORM:

Deputy Attorney General