

- (ii) Absent manufacturer specifications, at a frequency necessary to preclude accumulation of soil or mold.
- (c) Cooking and baking equipment.
 - (1) The food-contact surfaces of cooking and baking equipment shall be cleaned at least every twenty-four hours. This section does not apply to hot oil cooking and filtering equipment if it is cleaned as specified in subsection (b) (4) (F);
 - (2) The cavities and door seals of microwave ovens shall be cleaned at least every twenty-four hours by using the manufacturer's recommended cleaning procedure.
- (d) Nonfood-contact surfaces of equipment shall be cleaned at a frequency necessary to preclude accumulation of soil residues.
- (e) Dry cleaning.
 - (1) If used, dry cleaning methods such as brushing, scraping, and vacuuming shall contact only surfaces that are soiled with dry food residues that are not potentially hazardous (time/temperature control for safety food);
 - (2) Cleaning equipment used in dry cleaning food-contact surfaces may not be used for any other purpose.
- (f) Precleaning.
 - (1) Food debris on equipment and utensils shall be scrapped over a waste disposal unit or garbage receptacle or shall be removed in a warewashing machine with a prewash cycle;
 - (2) If necessary for effective cleaning, utensils and equipment shall be preflushed, presoaked, or scrubbed with abrasives.
- (g) Soiled items to be cleaned in a warewashing machine shall be loaded into racks, trays, or baskets or onto conveyors in a position that:
 - (1) Exposes the items to the unobstructed spray from all cycles; and
 - (2) Allows the items to drain.
- (h) Wet cleaning.
 - (1) Equipment food-contact surfaces and utensils shall be effectively washed to remove or completely loosen soils by using the manual or mechanical means necessary such as the application of detergents containing wetting agents and emulsifiers; acid, alkaline, or

abrasive cleaners; hot water; brushes; scouring pads; high-pressure sprays; or ultrasonic devices;

- (2) The washing procedures selected shall be based on the type and purpose of the equipment or utensil, and on the type of soil to be removed.

(i) If washing in sink compartments or a warewashing machine is impractical such as when the equipment is fixed or the utensils are too large, washing shall be done by using alternative manual warewashing equipment as specified in section 11-50-47(b)(3) in accordance with the following procedures:

- (1) Equipment shall be disassembled as necessary to allow access of the detergent solution to all parts;
- (2) Equipment components and utensils shall be scrapped or rough cleaned to remove food particle accumulation; and
- (3) Equipment and utensils shall be washed as specified in subsection (h)(1).

(j) Washed utensils and equipment shall be rinsed so that abrasives are removed and cleaning chemicals are removed or diluted through the use of water or a detergent-sanitizer solution by using one of the following procedures:

- (1) Use of a distinct, separate water rinse after washing and before sanitizing if using:
 - (A) A three-compartment sink;
 - (B) Alternative manual warewashing equipment equivalent to a three-compartment sink as specified in section 11-50-47(b)(3); or
 - (C) A three-step washing, rinsing, and sanitizing procedure in a warewashing system for CIP equipment;
- (2) Use of a detergent-sanitizer as specified in section 11-50-49(n) if using:
 - (A) Alternative warewashing equipment as specified in section 11-50-47(b)(3) that is approved for use with a detergent sanitizer; or
 - (B) A warewashing system for CIP equipment;
- (3) Use of a nondistinct water rinse that is integrated in the hot water sanitization immersion step of a two-compartment sink operation;

- (4) If using a warewashing machine that does not recycle the sanitizing solution as specified in paragraph (5), or alternative manual warewashing equipment such as sprayers, use of a nondistinct water rinse that is:
 - (A) Integrated in the application of the sanitizing solution; and
 - (B) Wasted immediately after each application; or
- (5) If using a warewashing machine that recycles the sanitizing solution for use in the next wash cycle, use of a nondistinct water rinse that is integrated in the application of the sanitizing solution. [Eff 2/24/2014; am and comp
SEP 01 2017] Auth: HRS §321-11) (Imp: HRS §321-11)

§11-50-51 Sanitization of equipment and utensils.

- (a) Equipment food-contact surfaces and utensils shall be sanitized.
- (b) Utensils and food-contact surfaces of equipment shall be sanitized before use after cleaning.
- (c) After being cleaned, equipment food-contact surfaces and utensils shall be sanitized in:
 - (1) Hot water manual operations by immersion for at least thirty seconds and as specified in section 11-50-49(j);
 - (2) Hot water mechanical operations by being cycled through equipment that is set up as specified in section 11-50-49(d), (k), and (l) and achieving a utensil surface temperature of one hundred sixty degrees Fahrenheit as measured by an irreversible registering temperature indicator; or
 - (3) Chemical manual or mechanical operations, including the application of sanitizing chemicals by immersion, manual swabbing, brushing, or pressure spraying methods, using a solution as specified in section 11-50-49(m). Contact times shall be consistent with those on EPA-registered label use instructions by providing:
 - (A) Except as specified in subparagraph (B), a contact time of at least ten seconds for a chlorine solution specified in section 11-50-49(m) (1);

- (B) A contact time of at least seven seconds for a chlorine solution of fifty mg/L that has a pH of ten or less and a temperature of at least one hundred degrees Fahrenheit or a pH of 8.0 or less and a temperature of at least seventy-five degrees Fahrenheit;
- (C) A contact time of at least thirty seconds for other chemical sanitizing solutions; or
- (D) A contact time used in relationship with a combination of temperature, concentration, and pH that, when evaluated for efficacy, yields sanitization as defined in section 11-50-2. [Eff 2/24/2014; comp SEP 01 2017
1 (Auth: HRS §321-11) (Imp: HRS §321-11)]

§11-50-52 Laundrying. (a) Clean linens shall be free from food residues and other soiling matter.

(b) Specifications.

- (1) Linens that do not come in direct contact with food shall be laundered between operations if they become wet, sticky, or visibly soiled;
- (2) Cloth gloves used as specified in section 11-50-32(n)(4) shall be laundered before being used with a different type of raw animal food such as beef, fish, lamb, pork or poultry;
- (3) Linens and napkins that are used as specified in section 11-50-32(1) and cloth napkins shall be laundered between each use;
- (4) Wet wiping cloths shall be laundered daily;
- (5) Dry wiping cloths shall be laundered as necessary to prevent contamination of food and clean serving utensils.

(c) Soiled linens shall be kept in clean, nonabsorbent receptacles or clean, washable laundry bags and stored and transported to prevent contamination of food, clean equipment, clean utensils, and single-service and single-use articles.

(d) Mechanical washing.

- (1) Except as specified in paragraph (2), linens shall be mechanically washed;
- (2) In food establishments in which only wiping cloths are laundered as specified in section 11-50-47(e)(2), the wiping cloths may be laundered in a mechanical washer, sink designated



only for laundering wiping cloths, or a warewashing or food preparation sink that is cleaned as specified in section 11-50-49(c).

- (e) Use of laundry facilities.
- (1) Except as specified in paragraph (2), laundry facilities on the premises of a food establishment shall be used only for the washing and drying of items used in the operation of the establishment;
- (2) Separate laundry facilities located on the premises for the purpose of general laundering such as for institutions providing boarding and lodging may also be used for laundering food establishment items. [Eff 2/24/2014; comp SEP 01 2017]
] (Auth: HRS §321-11) (Imp: HRS §321-11)

§11-50-53 Protection of clean items. (a) After cleaning and sanitizing, equipment and utensils:

- (1) Shall be air-dried or used after adequate draining as specified in the first paragraph of 40 CFR 180.940, entitled "Tolerance exemptions for active and inert ingredients for use in antimicrobial formulations (food-contact surface sanitizing solutions)", before contact with food; and
 - (2) May not be cloth dried except that utensils that have been air-dried may be polished with cloths that are maintained clean and dry.
- (b) Wiping cloths laundered in a food establishment that does not have a mechanical clothes dryer as specified in section 11-50-47(e) (2) shall be air-dried in a location and in a manner that prevents contamination of food, equipment, utensils, linens, and single-service and single-use articles and the wiping cloths. This section does not apply if wiping cloths are stored after laundering in a sanitizing solution as specified in section 11-50-49(m).
- (c) Lubricants shall be applied to food-contact surfaces that require lubrication in a manner that does not contaminate food-contact surfaces.
 - (d) Equipment shall be reassembled so that food-contact surfaces are not contaminated.
 - (e) Equipment, utensils, linens, and single-service and single-use articles.

- (1) Except as specified in paragraph (4), cleaned equipment and utensils, laundered linens, and single-service and single-use articles shall be stored:
 - (A) In a clean, dry location;
 - (B) Where they are not exposed to splash, dust, or other contamination; and
 - (C) At least six inches above the floor;
- (2) Clean equipment and utensils shall be stored as specified in paragraph (1) and shall be stored:
 - (A) In a self-draining position that allows air drying; and
 - (B) Covered or inverted;
- (3) Single-service and single-use articles shall be stored as specified in paragraph (1) and shall be kept in the original protective package or stored by using other means that afford protection from contamination until used;
- (4) Items that are kept in closed packages may be stored less than six inches above the floor on dollies, pallets, racks, and skids that are designed as specified in section 11-50-46(ii).
- (f) Prohibitions.
- (1) Except as specified in paragraph (2), cleaned and sanitized equipment, utensils, laundered linens, and single-service and single-use articles may not be stored:
 - (A) In locker rooms;
 - (B) In toilet rooms;
 - (C) In garbage rooms;
 - (D) In mechanical rooms;
 - (E) Under sewer lines that are not shielded to intercept potential drips;
 - (F) Under leaking water lines including leaking automatic fire sprinkler heads or under lines on which water has condensed;
 - (G) Under open stairwells; or
 - (H) Under other sources of contamination;
- (2) Laundered linens and single-service and single-use articles that are packaged or in a facility such as a cabinet may be stored in a locker room.
- (g) Kitchenware and tableware.
- (1) Single-service and single-use articles and cleaned and sanitized utensils shall be handled, displayed, and dispensed so that contamination of food- and lip-contact surfaces is prevented;

- (2) Knives, forks, and spoons that are not prewrapped shall be presented so that only the handles are touched by employees and by consumers if consumer self-service is provided;
- (3) Except as specified in paragraph (2), single-service articles that are intended for food- or lip-contact shall be furnished for consumer self-service with the original individual wrapper intact or from an approved dispenser.
- (h) Soiled tableware shall be removed from consumer eating and drinking areas and handled so that clean tableware is not contaminated.
 - (i) Preset tableware.
 - (1) Except as specified in paragraph (2), tableware that is preset shall be protected from contamination by being wrapped, covered, or inverted;
 - (2) Preset tableware may be exposed if:
 - (A) Unused settings are removed when a consumer is seated; or
 - (B) Settings not removed when a consumer is seated are cleaned and sanitized before further use.
 - (j) After being cleaned and sanitized, equipment and utensils shall not be rinsed before air drying or use unless:
 - (1) The rinse is applied directly from a potable water supply by a warewashing machine that is maintained and operated as specified in sections 11-50-46(n) to (jj) and 11-50-49(a) to (o); and
 - (2) The rinse is applied only after the equipment and utensils have been sanitized by the application of hot water or by the application of a chemical sanitizer solution whose EPA registered label use instructions call for rinsing off the sanitizer after it is applied in a commercial warewashing machine. [Eff 2/24/2014; comp SEP 01 2017]
(Auth: HRS §321-11) (Imp: HRS §321-11)

§§11-50-54 to 11-50-59 (Reserved).

SUBCHAPTER 5

WATER, PLUMBING, AND WASTE

§11-50-60 Water. (a) Drinking water shall be obtained from an approved source that is:

- (1) A public water system; or
- (2) A nonpublic water system that is constructed, maintained, and operated according to law.

(b) A drinking water system shall be flushed and disinfected before being placed in service, after construction, repair, or modification and after an emergency situation, such as a flood, that may introduce contaminants to the system.

(c) Bottled drinking water used or sold in a food establishment shall be obtained from approved sources in accordance with 21 CFR 129, entitled "Processing and bottling of bottled drinking water".

(d) Standards. Except as specified in subsection (e):

- (1) Water from a public water system shall meet 40 CFR 141, entitled "National primary drinking water regulations" and state drinking water quality standards; and
- (2) Water from a nonpublic water system shall meet state drinking water quality standards.

(e) Nondrinking water.

- (1) A nondrinking water supply shall be used only if its use is approved;
- (2) Nondrinking water shall be used only for nonculinary purposes such as air conditioning, nonfood equipment cooling, and fire protection.

(f) Except when used as specified in subsection (e), water from a nonpublic water system shall be sampled and tested as required by the department.

(g) The most recent sample report for the nonpublic water system shall be retained on file in the food establishment or the report shall be maintained as specified by state water quality regulations.

(h) Capacity.

- (1) The water source and system shall be of sufficient capacity to meet the peak water demands of the food establishment;

- (2) Hot water generation and distribution systems shall be sufficient to meet the peak hot water demands throughout the food establishment.
 - (i) Water under pressure shall be provided to all fixtures, equipment, and nonfood equipment that are required to use water except that water supplied as specified in subsection (k)(1) and (2) to a special event food establishment or in response to a temporary interruption of a water supply need not be under pressure.
 - (j) Water shall be received from the source through the use of:
 - (1) An approved public water main; or
 - (2) One or more of the following that shall be constructed, maintained, and operated according to law:
 - (A) Nonpublic water main, water pumps, pipes, hoses, connections, and other appurtenances;
 - (B) Water transport vehicles or other approved water transport delivery system; or
 - (C) Water containers.
 - (k) Water meeting the requirements specified in subsections (a) to (i) shall be made available for a mobile facility, for a special event food establishment without a permanent water supply, and for a food establishment with a temporary interruption of its water supply through:
 - (1) A supply of containers of commercially bottled drinking water;
 - (2) One or more closed portable water containers;
 - (3) An enclosed vehicular water tank; or
 - (4) An on-premises water storage tank.
- [Eff 2/24/2014; am and comp SEP 01 2017]
(Auth: HRS §321-11) (Imp: HRS §321-11)

§11-50-61 Plumbing system. (a) Approved.

- (1) A plumbing system and hoses conveying water shall be constructed and repaired with approved materials according to law;
- (2) A water filter shall be made of safe materials.
- (b) Approved system and cleanable fixtures.
 - (1) A plumbing system shall be designed, constructed, and installed according to law;
 - (2) A plumbing fixture such as a handwashing sink, toilet, or urinal shall be easily cleanable.
- (c) Handwashing sink, installation.

- (1) A handwashing sink if provided with hot water shall be equipped with a mixing valve or combination faucet;
 - (2) A steam mixing valve may not be used at a handwashing sink;
 - (3) A self-closing, slow-closing, or metering faucet shall provide a flow of water for at least fifteen seconds without the need to reactivate the faucet;
 - (4) An automatic handwashing facility shall be installed in accordance with manufacturer's instructions;
 - (5) Faucets shall provide a sufficient flow of water to permit proper washing and rinsing of hands.
- (d) An air gap between the water supply inlet and the flood level rim of the plumbing fixture, equipment, or nonfood equipment shall be at least twice the diameter of the water supply inlet and may not be less than one inch.
- (e) A backflow or backsiphonage prevention device installed on a water supply system shall meet American Society of Sanitary Engineering (A.S.S.E.) standards for construction, installation, maintenance, inspection, and testing for that specific application and type of device.
- (f) A water filter, screen, and other water conditioning device installed on water lines shall be designed to facilitate disassembly for periodic servicing and cleaning. A water filter element shall be of the replaceable type.
- (g) Handwashing sinks.
- (1) Except as specified in paragraph (2), at least one handwashing sink, a number of handwashing sinks necessary for their convenient use by employees in areas specified in subsection (1), and not fewer than the number of handwashing sinks required by law shall be provided;
 - (2) If approved and capable of removing the types of soils encountered in the food operations involved, automatic handwashing facilities may be substituted for handwashing sinks in a food establishment that has at least one handwashing sink.
- (h) At least one toilet and not fewer than the toilets required by law shall be provided.
- (i) Facilities for disposal of mop water and similar liquid waste shall be provided. At least one service sink or one curbed cleaning facility equipped with a floor drain

shall be provided and conveniently located for the cleaning of mops or similar wet floor cleaning tools and for the disposal of mop water and similar liquid waste for newly constructed or extensively remodeled establishments; except that the director may waive this requirement if an alternative liquid waste disposal facility is readily available.

(j) A plumbing system shall be installed to preclude backflow of a solid, liquid, or gas contaminant into the water supply system at each point of use at the food establishment, including on a hose bibb if a hose is attached or on a hose bibb if a hose is not attached and backflow prevention is required by law, by:

- (1) Providing an air gap as specified in subsection (d); or
- (2) Installing an approved backflow prevention device as specified in subsection (e).
- (k) Backflow prevention device, carbonator.
- (1) If not provided with an air gap as specified in subsection (d), a dual check valve with an intermediate vent preceded by a screen of not less than one hundred mesh to one inch shall be installed upstream from a carbonating device and downstream from any copper in the water supply line;
- (2) A dual check valve attached to the carbonator need not be of the vented type if an air gap or vented backflow prevention device has been otherwise provided as specified in paragraph (1).
- (1) A handwashing sink shall be located:
 - (1) To allow convenient use by employees in food preparation, food dispensing, and warewashing areas; and
 - (2) In, or immediately adjacent to, toilet rooms.

(m) A backflow prevention device shall be located so that it may be serviced and maintained.

(n) A water filter, screen, and other water conditioning device installed on water lines shall be located to facilitate disassembly for periodic servicing and cleaning.

- (o) Using a handwashing sink.
 - (1) A handwashing sink shall be maintained so that it is accessible at all times for employee use;
 - (2) A handwashing sink may not be used for purposes other than handwashing;

- (3) An automatic handwashing facility shall be used in accordance with manufacturer's instructions.
- (p) Prohibiting a cross connection.
- (1) A person may not create a cross connection by connecting a pipe or conduit between the drinking water system and a nondrinking water system or a water system of unknown quality;
- (2) The piping of a nondrinking water system shall be durably identified so that it is readily distinguishable from piping that carries drinking water.
- (q) Water reservoir of fogging devices, cleaning.
- (1) A reservoir that is used to supply water to a device such as a produce fogger shall be:
 - (A) Maintained in accordance with manufacturer's specifications; and
 - (B) Cleaned in accordance with manufacturer's specifications or according to the procedures specified in paragraph (2), whichever is more stringent;
- (2) Cleaning procedures shall include at least the following steps and shall be conducted at least once a week:
 - (A) Draining and complete disassembly of the water and aerosol contact parts;
 - (B) Brush-cleaning the reservoir, aerosol tubing, and discharge nozzles with a suitable detergent solution;
 - (C) Flushing the complete system with water to remove the detergent solution and particulate accumulation; and
 - (D) Rinsing by immersing, spraying, or swabbing the reservoir, aerosol tubing, and discharge nozzles with at least fifty mg/L hypochlorite solution.
- (r) A plumbing system shall be:
 - (1) Repaired according to law; and
 - (2) Maintained in good repair.
- (s) Water tanks
 - (1) Materials that are used in the construction of a water tank, and appurtenances shall be:
 - (A) Safe;
 - (B) Durable, corrosion-resistant, and nonabsorbent; and
 - (C) Finished to have a smooth, easily cleanable surface.

- (2) A water tank shall be:
 - (A) Enclosed from the filling inlet to the discharge outlet; and
 - (B) Sloped to an outlet that allows complete drainage of the tank.
- (3) If a water tank is designed with an access port for inspection and cleaning, the opening shall be in the top of the tank and:
 - (A) Flanged upward at least 0.5 inch; and
 - (B) Equipped with a port cover assembly that is:
 - (i) Provided with a gasket and device for securing the cover in place; and
 - (ii) Flanged to overlap the opening and sloped to drain.
- (4) A fitting with "V" type threads on a water tank inlet or outlet shall be allowed only when a hose is permanently attached.
- (5) If provided, a water tank vent shall terminate in a downward direction and shall be covered with:
 - (A) Sixteen mesh to one inch screen or equivalent when the vent is in a protected area; or
 - (B) A protective filter when the vent is in an area that is not protected from windblown dirt and debris.
- (6) Inlet and outlet, sloped to drain.
 - (A) A water tank and its inlet and outlet shall be sloped to drain; and
 - (B) A water tank inlet shall be positioned so that it is protected from contaminants such as waste discharge, road dust, oil, or grease.
- (7) A hose used for conveying drinking water from a water tank shall be:
 - (A) Safe;
 - (B) Durable, corrosion-resistant, and nonabsorbent;
 - (C) Resistant to pitting, chipping, crazing, scratching, scoring, distortion, and decomposition;
 - (D) Finished with a smooth interior surface; and
 - (E) Clearly and durably identified as to its use if not permanently attached.
- (8) A filter that does not pass oil or oil vapors shall be installed in the air supply line between

the compressor and drinking water system when compressed air is used to pressurize the water tank system.

- (9) A cap and keeper chain, closed cabinet, closed storage tube, or other approved protective cover or device shall be provided for a water inlet, outlet, and hose.
- (10) A water tank, pump, and hoses shall be flushed and sanitized before being placed in service after construction, repair, modification, and periods of nonuse.
- (11) A person shall operate a water tank, pump, and hoses so that backflow and other contamination of the water supply are prevented.
- (12) If not in use, a water tank and hose inlet and outlet fitting shall be protected using a cover or device as specified in subsection (i).
- (13) Tank, pump, and hoses, dedication.
 - (A) Except as specified in paragraph (2), a water tank, pump, and hoses used for conveying drinking water shall be used for no other purpose;
 - (B) Water tanks, pumps, and hoses approved for liquid foods may be used for conveying drinking water if they are cleaned and sanitized before they are used to convey water. [Eff 2/24/2014; am and comp SEP 01 2017] (Auth: HRS §321-11) (Imp: HRS §321-11)

§11-50-62 REPEALED. [R]

§11-50-63 Sewage, other liquid waste, and rainwater.

- (a) A sewage holding tank in a mobile food establishment shall be:
 - (1) Sized fifteen per cent larger in capacity than the water supply tank; and
 - (2) Provided with a tank bottom that is sloped down to an outlet with a shut-off valve to permit complete drainage of the tank, except for those tanks that are readily removable.
- (b) Food establishment drainage systems, including grease traps, that convey sewage shall be designed and installed as specified in section 11-50-61(b)(1).

- (c) Backflow prevention.
- (1) Except as specified in paragraphs (2), (3) and (4), a direct connection may not exist between the sewage system and a drain originating from equipment in which food, portable equipment, or utensils are placed;
- (2) Paragraph (1) does not apply to floor drains that originate in refrigerated spaces that are constructed as an integral part of the building;
- (3) If allowed by law, a warewashing machine may have a direct connection between its waste outlet and a floor drain when the machine is located within five feet of a trapped floor drain and the machine outlet is connected to the inlet side of a properly vented floor drain trap;
- (4) If allowed by law, a warewashing or culinary sink may have a direct connection.
- (d) If used, a grease trap shall be located to be easily accessible for cleaning.
- (e) Sewage shall be conveyed to the point of disposal through an approved sanitary sewage system or other system, including use of sewage transport vehicles, waste retention tanks, pumps, pipes, hoses, and connections that are constructed, maintained, and operated according to law.
- (f) Sewage and other liquid wastes shall be removed from a mobile food establishment at an approved waste servicing area or by a sewage transport vehicle in such a way that a public health hazard or nuisance is not created.
- (g) A tank for liquid waste retention shall be thoroughly flushed and drained in a sanitary manner during the servicing operation.
- (h) Sewage shall be disposed through an approved facility that is:
 - (1) A public sewage treatment plant; or
 - (2) An individual sewage disposal system that is sized, constructed, maintained, and operated according to law.
- (i) Condensate drainage and other nonsewage liquids and rainwater shall be drained from point of discharge to disposal according to law. [Eff 2/24/2014; comp **SEP 01 2017**]
] (Auth: HRS §321-11) (Imp: HRS §321-11)

§11-50-64 Refuse, recyclables, and returnables. (a)
If located within the food establishment, a storage area for refuse, recyclables, and returnables shall meet the