

# Chapter 4

## Equipment, Utensils, and Linen

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### 4-1 Plan Submission and Approval

#### Subparts

- 4-101 Facility and Operating Plans
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- 4-103 Uncategorized Food Establishment

#### 4-101 Facility and Operating Plans

##### 4-101.11 When Plans are Required

A PERMIT applicant or PERMIT HOLDER shall submit to the HEALTH AUTHORITY properly prepared plans and specifications for review and approval as specified in *NRS 446.930* prior to:

- (A) The construction of a FOOD ESTABLISHMENT.
- (B) The conversion of an existing structure for use as a FOOD ESTABLISHMENT.
- (C) The remodeling of a FOOD ESTABLISHMENT, if the HEALTH AUTHORITY determines that plans and specifications are necessary to ensure compliance with these Regulations.

##### 4-101.12 Contents of the Plans and Specifications

The plans and specifications for a FOOD ESTABLISHMENT, including a FOOD ESTABLISHMENT with a HACCP PLAN, shall include as required by the HEALTH AUTHORITY based on the type of operation, the type of FOOD preparation and FOOD prepared. This information can be accessed at SNHD's Website. The below information is required to demonstrate compliance with these Regulations.

- (A) Intended menu.
- (B) Anticipated volume of FOOD to be stored, prepared, and sold or served.
- (C) Proposed layout, mechanical schematics, construction materials, and finish schedules.
- (D) Proposed EQUIPMENT types, manufacturers, model numbers, locations, dimensions, performance capacities, and installation specifications.
- (E) Standard operating procedures that demonstrate compliance with these Regulations may be required by Plan Review.
- (F) A declaration stating exempt or non-exempt status, as specified in the *Nevada Clean Indoor Air Act, NRS 202.2483*, shall be submitted at the time of application along with a copy of the appropriate gaming or business license.
- (G) Other information that may be required by the HEALTH AUTHORITY for the proper review of the proposed construction, conversion, or modification, including procedures for operating a FOOD ESTABLISHMENT.
- (H) A statement signed by the applicant declaring exempt or non-exempt status of the facility as specified in the *Nevada Clean Indoor Air Act, NRS 202.2483*.

##### 4-101.13 WAIVER Modifications

The HEALTH AUTHORITY may grant a WAIVER by modifying the requirements of these Regulations, if in the opinion of the HEALTH AUTHORITY a health HAZARD or nuisance will not result from the WAIVER. During the WAIVER process, the HEALTH AUTHORITY may impose conditions upon the WAIVER. If a WAIVER is granted, the HEALTH AUTHORITY shall retain the information in its records for the FOOD ESTABLISHMENT. Failure to meet conditions of the WAIVER may result in immediate revocation of the WAIVER.

##### 4-101.14 When a HACCP PLAN is Required

- (A) Prior to implementing a HACCP PLAN required by the HEALTH AUTHORITY, a PERMIT applicant or PERMIT HOLDER shall pay applicable fees and submit to the HEALTH AUTHORITY for approval a properly prepared HACCP PLAN as specified in Section 4-101.15 of this Chapter and the relevant provisions of these Regulations if:
  - (1) Submission of a HACCP PLAN is required according to LAW.
  - (2) A WAIVER is required as specified in Chapter 3-502.11 of these Regulations.

- (3) The HEALTH AUTHORITY determines that a FOOD preparation or processing method requires a WAIVER based on a plan submitted as specified in Section 4-101.13 of this Chapter, an inspectional finding, or a WAIVER request.
- (B) A FOOD ESTABLISHMENT packages PHF (TCS) using a REDUCED OXYGEN PACKAGING method as specified in Chapter 3-502.13 of these Regulations.

#### **4-101.15 Contents of HACCP PLAN**

For a FOOD ESTABLISHMENT that is required to have a HACCP PLAN, as specified in Section 4-101.13 of this Chapter, the plan shall include:

- (A) A categorization of the types of PHF (TCS) that are specified in the menus including but not limited to soups, sauces, salads, and bulk solid FOOD including but not limited to MEAT roasts, or other FOOD that is specified by the HEALTH AUTHORITY.
- (B) A flow diagram by specific FOOD, or FOOD category type, identifying CRITICAL CONTROL POINTs and providing information on:
  - (1) Ingredients, materials, and EQUIPMENT used in the preparation of that FOOD or FOOD category.
  - (2) Formulations or recipes which incorporate methods and procedural controls that address the FOOD safety concerns.
- (C) The FOOD HANDLER and supervisory training plan that addresses the FOOD safety concerns.
- (D) The standard operating procedures under the plan, which shall clearly identify:
  - (1) Each CRITICAL CONTROL POINT.
  - (2) The CRITICAL LIMITs for each CRITICAL CONTROL POINT.
  - (3) The method and frequency of monitoring and controlling each CRITICAL CONTROL POINT by the FOOD HANDLER designated by the PERSON IN CHARGE.
  - (4) The method and frequency for the PERSON IN CHARGE to routinely verify that the FOOD HANDLER is following standard operating procedures and monitoring CRITICAL CONTROL POINTs.
  - (5) Action to be taken by the PERSON IN CHARGE if the CRITICAL LIMITs for each CRITICAL CONTROL POINT is not met.
  - (6) Records to be maintained by the PERSON IN CHARGE to demonstrate that the HACCP PLAN is properly adhered to, operated, and managed.

#### **4-102 Construction Inspection and Approval**

##### **4-102.11 Pre-Operational Inspections**

The HEALTH AUTHORITY shall conduct one or more pre-operational inspections to verify that the FOOD ESTABLISHMENT is constructed and equipped in accordance with the APPROVED plans and APPROVED modifications of those plans, and that established standard operating procedures as specified in Section 4-101.12 (E) of this Chapter are followed and are in compliance with these Regulations.

#### **4-103 UNCATEGORIZED FOOD ESTABLISHMENT**

##### **4-103.11 Requirements**

UNCATEGORIZED FOOD ESTABLISHMENTs may deviate from certain structural and/or operational requirements of these Regulations, upon approval of the HEALTH AUTHORITY if:

- (A) The design, construction, and operation are within the limits of sound engineering and SANITIZATION practices, and as long as there is no public health or safety HAZARD to employees or customers.
  - (1) The deviation is necessary because of the limitations of the proposed unique design or business plan.
  - (2) Such design and operational deviations or special conditions are provided to the HEALTH AUTHORITY in writing, and the HEALTH AUTHORITY approves the plan.
  - (3) The operating PERMIT issued for an UNCATEGORIZED FOOD ESTABLISHMENT must denote that such PERMIT is constrained and limited to the APPROVED design and operational plans, and that any deviation may result in immediate suspension of the health PERMIT.
  - (4) The HEALTH AUTHORITY shall require such measures as it deems necessary to ensure the health and safety of the public including but not limited to, Standard Operating Procedures (SOPs), a HACCP PLAN, monitoring logs, WAIVERS, and/or VARIANCES.
- (B) Modification of any existing restaurant into a stand-alone bar, tavern or saloon with a physically segregated restaurant under the same roof or in the same building must be first APPROVED by the HEALTH AUTHORITY through the HEALTH AUTHORITY's plan review process. For this section, "physically segregated" means:
  - (1) Smoking and nonsmoking areas must be separated by a complete partition or by solid doors which fit tightly, close automatically and remain closed except during use.

- (2) Separate entrances to the non-smoking FOOD ESTABLISHMENT and areas where smoking is allowed, either from outside the establishments or accessible via a non-smoking foyer or corridor.
- (3) Non-smoking access to restrooms shared in common between non-smoking FOOD ESTABLISHMENTS and areas where smoking is allowed.
- (4) To prevent smoke infiltration into the restaurant, the ventilation system for the stand-alone bar, tavern or saloon must be independent from the restaurant ventilation system.
- (5) Food sales within the stand-alone bar is RESTRICTED to incidental FOOD-service items such as peanuts, popcorn, chips, pretzels or any other incidental FOOD items that are exempt from FOOD licensing requirements pursuant to *Subsection 2 of NRS 446.870*.

## **4-2 Equipment**

### **Subparts**

- 4-201 Materials, Design, and Construction for Approvals of Equipment for Sanitation**
- 4-202 Equipment Design and Capacities for Functionality**
- 4-203 Equipment Location and Installation**
- 4-204 Equipment Maintenance, Repair, and/or Replacement**

### **4-201 Materials, Design, and Construction for Approvals of EQUIPMENT for Sanitation**

#### **4-201.11 General Design and Construction of EQUIPMENT**

- (A) EQUIPMENT shall be designed and constructed to be durable and to maintain its characteristics under normal use conditions.
- (B) FOOD-CONTACT SURFACES of EQUIPMENT, except cooking oil storage tanks, distribution lines for cooking oils, or BEVERAGE syrup lines or tubes shall be:
  - (1) Finished to have SMOOTH, EASILY CLEANABLE surfaces.
  - (2) Free of rough welds or joints, breaks, open seams, cracks, chips, inclusions, pits, and similar imperfections.
  - (3) Free of "V" type threads, and sharp internal angles, corners, and crevices.
  - (4) Accessible, without requiring disassembly by use of power tools or specialized hand tools, for cleaning and inspection.
  - (5) Made of materials that do not allow the migration of harmful substances or impart colors, odors, or tastes to FOOD, and that are:
    - (a) Safe.
    - (b) Non-absorbent and made of CORROSION-RESISTANT MATERIAL.
    - (c) Durable and of sufficient weight and thickness to withstand repeated WARE WASHING.
    - (d) Resistant to pitting, chipping, crazing, scratching, scoring, distortion, and decomposition.
- (C) NON FOOD-CONTACT SURFACES of EQUIPMENT that are exposed to splash, spillage, or other FOOD soiling, or that require frequent cleaning shall be constructed of a CORROSION-RESISTANT MATERIAL, and be SMOOTH and non-absorbent.
- (D) All NON FOOD-CONTACT SURFACES of EQUIPMENT shall be free of unnecessary ledges, projections and crevices, and be designed and constructed to allow easy cleaning and to facilitate maintenance.

#### **4-201.12 Standards for Sanitation**

EQUIPMENT used in a Clark County FOOD ESTABLISHMENT shall meet or exceed the standards for sanitation established by the *AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)*, the *Baking Industry Sanitation Standards Committee (BISSC)* and/or the *National Sanitation Foundation International (NSF)*, including *NSF/ANSI Install Standards* except that standards for construction of EQUIPMENT required to be present in a FOOD ESTABLISHMENT may not apply to a child care facility with a limited menu as specified in *NRS 446.941*.

#### **4-201.13 Third Party Certifications for Sanitation**

EQUIPMENT that is not factory certified as meeting *ANSI* or *BISSC* standards, but for which *ANSI* or *BISSC* Standards exist, must be examined at the expense of the FOOD ESTABLISHMENT by one of the following testing services before being APPROVED for use:

- (A) *National Sanitation Foundation (NSF)*, Ann Arbor, Michigan
- (B) *Underwriters Laboratory, Classified Inc. (UL/EPH) Classified*, Northbrook, Illinois.
- (C) *Intertek Testing Services (ETL Sanitation)*, Cortland, New York.
- (D) Other entities APPROVED by *ANSI* or *BISSC*.

#### **4-201.14 EQUIPMENT in Categories Not Covered by Sanitation Standards**

As per *NAC 446.275* EQUIPMENT in categories not covered by *ANSI* or *BISSC* Sanitation Standards, including but not limited to some Tandori and pizza ovens, candy processing, commercial manufacturing, BARBECUE, and MOBILE VENDOR EQUIPMENT shall:

- (A) Comply with all general design and construction criteria as specified in Section 4-201.11 of this Chapter.
- (B) Be used only with written approval by the HEALTH AUTHORITY. Additional information may be required for approval, which may include but not be limited to:
  - (1) Requirements for laboratory or field testing as a basis for approval.
  - (2) Specific use limitations based on identified RISK factors.
  - (3) Written proof of approval by a governmental agency, including but not limited to the *FDA* or *USDA*.

**4-201.15 Limited Uses of Materials Not Compliant with *ANSI* or *BISSC* Standards**

EQUIPMENT with materials that do not comply with general *ANSI* or *BISSC* standards may be used in a FOOD ESTABLISHMENT only for the following limited uses:

- (A) Cast iron may be used in EQUIPMENT only:
  - (1) As a surface for cooking, then serving and,
  - (2) If maintained clean and in a rust-free condition.
- (B) Lead may be present in a FOOD-CONTACT SURFACE only in:
  - (1) Pewter alloys containing less than 0.05% lead.
  - (2) Solder and flux containing less than 0.2% lead.
- (C) Copper and copper alloys, including but not limited to brass:
  - (1) Shall not be used for a fitting or tubing installed between a carbonator and a testable backflow prevention device or assembly.
  - (2) May **not** be used as a FOOD-CONTACT SURFACE for highly acidic FOOD including but not limited to vinegar, fruit JUICE, or wine.
  - (3) May be used in contact with beer brewing ingredients in the pre-fermentation and fermentation steps of brewing beer in a brew pub or microbrewery.
- (D) Galvanized metal:
  - (1) Shall not be used for EQUIPMENT FOOD-CONTACT SURFACES involving contact with highly acidic FOOD including but not limited to vinegar, fruit JUICE, or wine.
  - (2) Ventilation hood canopies shall not be used in any new or re-modeled FOOD service areas.
  - (3) In existing hood systems, which includes the back flashes and filters, shall be replaced with APPROVED, non-galvanized materials when any of their components are:
    - (a) In disrepair.
    - (b) Damaged or not protected by an intact zinc coating.
    - (c) Corroded or rusted.
    - (d) Illegally modified.
- (E) Wood and wood wicker shall not be used as a FOOD-CONTACT SURFACE of EQUIPMENT except that:
  - (1) Hard maple, or an equivalently hard close-grained wood, maintained SMOOTH and easily cleanable, may be used for:
    - (a) Cutting blocks and bakers' tables.
    - (b) Large spatulas for use at a bakery oven or pizza oven.
    - (c) Wooden paddles used in confectionery operations for pressure scraping kettles when manually preparing confections at a temperature of 230°F±2°, or above.
    - (d) Bamboo steamer baskets used for cooking shall be SMOOTH and easily cleanable and maintained clean. Single service liners shall be placed between the basket and FOOD.
    - (e) Traditional ethnic UTENSILS including but not limited to sushi mixing bowls and tortilla presses, which are maintained and used as specified by manufacturer instructions. Round soft wood or coated wood cutting blocks are prohibited.
  - (2) Untreated wooden shipping containers in which whole, uncut raw fruits and vegetables, or nuts in the shell were received may be used for storage until the FOOD is used.
  - (3) Wooden containers, either untreated or treated with an APPROVED wood preservative, may be used for storage of whole, uncut raw FOOD, which requires removal of rinds, peels, husks, or shells before consumption.
- (F) Glass sensors, or stems of FOOD TEMPERATURE MEASURING DEVICES, may be used only when they are encased in a shatterproof coating, including but not limited to candy thermometers.
- (G) Polyvinyl chloride (PVC) in a FOOD ESTABLISHMENT is APPROVED for use only when meeting *NSF/ANSI Standard 14*.

#### **4-201.16 CIP EQUIPMENT**

CIP EQUIPMENT shall meet the characteristics specified in Section 4-201.11 (B) of this Chapter, and shall be designed and constructed so that:

- (A) Cleaning and sanitizing solutions circulate through, and contact all, fixed interior FOOD-CONTACT SURFACES.
- (B) The system is self-draining, or capable of being completely drained of cleaning and sanitizing solutions.
- (C) Units which cannot be disassembled for cleaning, access points are present to allow inspection to ensure that all interior FOOD-CONTACT SURFACES are effectively cleaned.

#### **4-201.17 Hot Oil Filtering EQUIPMENT**

Hot oil filtering EQUIPMENT shall meet the characteristics specified in Section 4-201.11 of this Chapter or shall be readily accessible for filter replacement and cleaning of the filter. This requirement does not apply to Section 4-201.11 (B) (3), to Sections 4-201.12, and 4-201.13 of this Chapter.

#### **4-201.18 Can Openers**

Cutting or piercing parts of can openers shall be readily removable or replaceable.

#### **4-201.19 EQUIPMENT Compartments that are Subject to Moisture Accumulation**

EQUIPMENT compartments that are subject to moisture accumulation due to conditions including but not limited to condensation, FOOD or BEVERAGE drip, or water from melting ice shall be sloped to an outlet that allows complete and continuous draining.

#### **4-202 EQUIPMENT Design and Capacities for Functionality**

##### **4-202.11 EQUIPMENT for Cooling, Heating, and/or Holding Temperature Controlled FOOD**

- (A) EQUIPMENT for cooling and heating FOOD, and/or holding cold and hot FOOD, shall be sufficient in number and capacity to ensure FOOD temperatures as specified in Chapter 3 of these Regulations.
- (B) Cold or hot holding EQUIPMENT used for PHF (TCS) shall be equipped with at least one integral or permanently affixed TEMPERATURE MEASURING DEVICE located to allow easy viewing of its temperature display. This Section does not apply to EQUIPMENT for which the placement of a TEMPERATURE MEASURING DEVICE is not a practical means for measuring the ambient air surrounding the FOOD because of the design, type, and use of the EQUIPMENT including but not limited to calrod units, heat lamps, cold plates, bain maries, steam tables, insulated FOOD transport containers, and salad bars.
- (C) A TEMPERATURE MEASURING DEVICE in FOOD EQUIPMENT shall:
  - (1) Have its sensor located to measure the air temperature or a simulated product temperature in:
    - (a) The warmest part of a mechanically refrigerated unit.
    - (b) The coolest part of a hot FOOD storage unit.
  - (2) Be accurate to  $\pm 2^{\circ}\text{F}$  in the intended range of use for monitoring the temperature of FOOD.
  - (3) Be designed to be easily readable.

##### **4-202.12 Three-Compartment Sinks**

- (A) A three-compartment sink shall be installed in an area that has been APPROVED by the HEALTH AUTHORITY in each FOOD ESTABLISHMENT in which WARE WASHING and sanitizing of UTENSILS is required, and shall:
  - (1) Have an integral, self-draining drain board on each end.
  - (2) Be indirectly plumbed to a floor sink, and be supplied with hot and cold water tempered water by a mixing valve, or a combination faucet.
  - (3) Have sink compartments large enough to accommodate  $\frac{1}{2}$  immersion of the largest EQUIPMENT and UTENSILS that are not to be cleaned and sanitized by alternate, APPROVED methods including but not limited to high pressure detergent sprayers, low or line pressure spray detergent foamers, other task specific cleaning EQUIPMENT, brushes, or other implements.
- (B) To accommodate all soiled and cleaned items which may accumulate during hours of operation, drain boards, UTENSIL racks, or tables, in adequate size and number, shall be provided for UTENSIL holding before cleaning and after sanitizing.
- (C) In areas that process or prepare raw FOOD of animal origin for consumption as READY-TO-EAT FOOD, a separate three-compartment sink shall be provided for the sole use of that operation.
- (D) PERMITTED satellite areas, including bars, operating in conjunction with a main WARE WASHING facility, owned, leased, or managed by the same PERMITTEE, may operate without a three compartment sink provided that a glass washer is provided at the bar, and in all cases, WARE WASHING procedures must be APPROVED by the HEALTH AUTHORITY.

#### **4-202.13 WARE WASHING Machines**

- (A) Data Plate Operating Specification: A WARE WASHING machine shall have an easily accessible and readable data plate, affixed to the machine by the manufacturer, stating its design and operating specifications which include:
  - (1) Temperatures required for washing, rinsing, and sanitizing.
  - (2) The pressure required for the fresh water sanitizing rinse, unless the machine is designed to use only a pumped sanitizing rinse.
  - (3) The conveyor speed for conveyor machines or the cycle time for stationary rack machines.
  - (4) A new manufacturer's data plate shall be installed reflecting any conversion if an APPROVED convertible WARE WASHING machine is converted from a high temperature sanitizing rinse to a chemical sanitizing rinse, or *vice-a-versa*.
- (B) Internal Baffles: WARE WASHING machines with wash and rinse tanks shall be equipped with baffles, curtains, or other means to minimize CROSS-CONTAMINATION of the solutions in the wash and rinse tanks.
- (C) TEMPERATURE MEASURING DEVICES: A WARE WASHING machine shall be equipped with a TEMPERATURE MEASURING DEVICE that indicates the temperature of the water with a numerical scale, printed record, or digital readout in increments no greater than  $\pm 2^{\circ}\text{F}$  in the intended range of use:
  - (1) In each wash and rinse tank.
  - (2) As the water enters the hot water sanitizing final rinse manifold or in the chemical sanitizing solution tank.
- (D) Automatic Dispensing of Detergents and Sanitizers: A WARE WASHING machine shall be designed and equipped to:
  - (1) Automatically dispense detergents and sanitizers.
  - (2) Incorporate a visual means to verify that detergents and sanitizers are delivered, or a visual or audible alarm to signal that the detergents and sanitizers are not being delivered during the respective washing and sanitizing cycles.
- (E) Pressure Regulation for Hot Water (high temperature) Sanitizing: A WARE WASHING machine that provides a fresh hot water sanitizing rinse shall:
  - (1) Be equipped with a pressure gauge or a similar device, including but not limited to a transducer which measures and displays the water pressure:
    - (a) In increments not greater than one pound per square inch (psi).
    - (b) With an accuracy of  $\pm 2$  psi in the operational range of 15-25 psi as measured in the water line immediately downstream from the fresh hot water sanitizing rinse control valve.
  - (2) If the pressure measuring device is located upstream of the fresh hot water sanitizing rinse control valve, the device shall be mounted on a  $\frac{1}{4}$ " iron pipe size (IPS) valve.
- (F) Integral drain boards: A WARE WASHING machine shall have integral self-draining, drain boards.
- (G) Accessory Draining EQUIPMENT: Drain boards, UTENSIL racks, or tables large enough to accommodate all soiled or cleaned items that may accumulate during hours of operation, shall be provided for necessary UTENSIL holding before cleaning, and after sanitizing.

**4-202.14 WARE WASHING Machine/Sink Combination Units**

- (A) Sinks that are an integral part of a WARE WASHING machine unit shall be used for no other purpose than WARE WASHING.
- (B) When WARE WASHING machines and three-compartment sink units share an integral drain board, procedures shall be in place to ensure that CONTAMINATION of clean UTENSILS does not occur.

**4-202.15 Ventilation Hood System**

- (A) Adequacy:
  - (1) A ventilation hood shall be installed:
    - (a) Over cooking EQUIPMENT that releases grease laden vapors.
    - (b) Where required by local building and safety authorities.
    - (c) When accumulation of greasy residue on walls or ceiling indicates that grease laden vapor is not being properly removed.
  - (2) Ventilation hood systems and devices shall be sufficient in number and capacity to prevent grease or condensation from accumulation on walls and/or ceilings.
  - (3) Sunday brunches, temporary set-ups, table-side cooking, sampling, and demonstrations may be exempt, provided grease does not accumulate in the immediate area, as determined by the HEALTH AUTHORITY.
- (B) Drip Prevention: Exhaust ventilation hood systems in FOOD preparation or WARE WASHING areas including but not limited to hoods, fans, guards, and ducts shall be designed to prevent grease or

condensation from draining or dripping onto FOOD HANDLERS, FOOD, EQUIPMENT, UTENSILS, LINEN, and/or SINGLE-SERVICE ARTICLES and SINGLE-USE ARTICLES.

- (C) Filters: Filters or other grease extracting EQUIPMENT shall be designed to be readily removable for cleaning and replacement, unless designed to be CLEANED IN PLACE the filter shall be made of the same metal as the hood system.

#### **4-202.16 Clothes Washers and Dryers**

A mechanical clothes washer and dryer shall be provided and used if work clothes or LINEN are LAUNDERED on the PREMISES. Their location in the facility shall be authorized by the HEALTH AUTHORITY.

#### **4-202.17 EQUIPMENT Kick Plates, Removable**

Kick plates shall be designed so that the areas behind them are accessible for inspection and cleaning by being:

- (A) Capable of being rotated open without unlocking EQUIPMENT or doors.  
(B) Removable:  
(1) Without disassembly or,  
(2) By disassembling without the use of tools or,  
(3) By disassembling with the use of simple hand-held tools including but not limited to screwdrivers, pliers, open-ended wrenches, or Allen wrenches.

#### **4-202.18 EQUIPMENT Openings, Closures, and Deflectors**

- (A) A cover or lid for EQUIPMENT shall overlap the opening and be sloped to drain.  
(B) An opening located within the top of a unit of EQUIPMENT, which is designed for use with a cover or lid, shall have an upward flange of at least 2/10".  
(C) Fixed piping, TEMPERATURE MEASURING DEVICES, rotary shafts, and other parts extending into EQUIPMENT shall have a watertight joint at the point where the item enters the EQUIPMENT. If a watertight joint is not provided:  
(1) The fixed piping, TEMPERATURE MEASURING DEVICES, rotary shafts, and other parts extending through the openings shall be equipped with an apron designed to deflect condensation, drips, and dust from openings into FOOD.  
(2) The opening shall have an upward flange of at least 2/10".

#### **4-202.19 Shelving**

- (A) Shelves that are located in an area where FOOD is prepared, or in standing refrigerators and freezers, or where UTENSILS are washed shall be made of metal, plastic, or plastic coated CORROSION-RESISTANT MATERIAL, and be EASILY CLEANABLE.  
(B) All shelves located in walk-in refrigerators or freezers used in direct support of FOOD preparation, including but not limited to kitchens and pantries shall:  
(1) Be made of metal, plastic, or plastic coated CORROSION-RESISTANT MATERIAL, and EASILY CLEANABLE.  
(2) Be maintained in a manner that does not RESTRICT the circulation of air.  
(C) Shelves located in separate DRY STORAGE AREAS shall be made of CORROSION-RESISTANT MATERIAL, and made of metal, plastic, plastic coated materials, or other durable EASILY CLEANABLE materials, including wood products that have a SMOOTH finish that is resistant to damage by spills of FOOD, water, or alcohol leaks.

#### **4-202.20 Bearings and Gear Boxes**

EQUIPMENT containing bearings and gears that require lubricants shall be designed and constructed so that the lubricant cannot leak, drip, or be forced into FOOD or onto FOOD CONTACT-SURFACES.

#### **4-202.21 BEVERAGE Tubing**

BEVERAGE tubing and BEVERAGE cooling devices, including but not limited to cold plates, and cooling coils shall not be installed in contact with ice used for human consumption, except for cold plates that are constructed integrally with an ice storage bin.

#### **4-202.22 Ice Unit Drains**

Liquid waste drain lines shall not pass through an ice machine or ice storage bin.

#### **4-202.23 Condenser Units in FOOD Storage EQUIPMENT**

If a condenser unit is an integral component of EQUIPMENT, the condenser unit shall be separated from any FOOD, and FOOD storage space, by a dust proof barrier.

#### **4-202.24 MOLLUSCAN SHELLSTOCK/Crustacean/Finfish Life Support System Tanks**

Life support system tanks that are used:

- (A) Only to display aquatic life, which is not offered for human consumption, shall be conspicuously marked so that it is obvious to the CONSUMER that the aquatic life is for display only.
- (B) To store SHELLSTOCK/Crustacean/Finfish that is offered for human consumption, shall meet the requirements as specified in Chapter 9-204.12 of these Regulations, and be operated and maintained to ensure that:
  - (1) Water from finfish tanks shall not be COMMINGLED between any molluscan shellfish tanks.
  - (2) The identity of the source of the SHELLSTOCK is retained as specified in Chapter 3-203.11 of these Regulations.
  - (3) Filtration and disinfection systems or programs shall be APPROVED by the HEALTH AUTHORITY and followed to maintain the safety and quality of the SHELLSTOCK.

**4-203 EQUIPMENT Location and Installation**

**4-203.11 Storage EQUIPMENT**

EQUIPMENT used for storage of FOOD, cleaned and sanitized EQUIPMENT, UTENSILS, LAUNDERED LINEN, and SINGLE-SERVICE ARTICLES 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 where water has condensed.
- (G) Under open stairwells containing steps which are not fully enclosed with backs and sides to prevent debris from falling onto the items stored below the open stairwell.
- (H) Under other sources of CONTAMINATION.

**4-203.12 Stationary EQUIPMENT that is Fixed in Place**

EQUIPMENT that is fixed in place, because it is not EASILY MOVEABLE, shall be:

- (A) Spaced to allow access for cleaning along the sides, behind, and above the EQUIPMENT.
- (B) Flashed and SEALED.
- (C) Spaced from adjoining EQUIPMENT, walls, and ceilings, at a distance not more than 1/32", with the space being SEALED. Caulking may not be used for spaces greater than 1/8".

**4-203.13 Table or COUNTER-MOUNTED EQUIPMENT that is not EASILY MOVEABLE**

Table or COUNTER-MOUNTED EQUIPMENT, that is not EASILY MOVEABLE, shall be installed to allow cleaning of the EQUIPMENT, and areas underneath and around the EQUIPMENT by being:

- (A) SEALED to the surface or,
- (B) Elevated at least 4" on legs.

**4-203.14 Floor-Mounted EQUIPMENT that is not EASILY MOVEABLE**

Floor-mounted EQUIPMENT that is not EASILY MOVEABLE shall be SEALED to the floor, or elevated on legs that provide at least a 6" clearance between the floor and the EQUIPMENT. This Section does not apply to display refrigeration units and display freezer units located in the CONSUMER shopping areas of a retail FOOD store, provided the floor under the units is maintained clean.

**4-204 EQUIPMENT Maintenance, Repair, and/or Replacement**

**4-204.11 General EQUIPMENT Adjustment, Repair, and/or Replacement**

- (A) EQUIPMENT shall be maintained in a state of repair, condition, and location that meets the requirements as specified in Section 4-2 of this Chapter.
- (B) EQUIPMENT components, including but not limited to doors, seals, gaskets, hinges, fasteners, and kick plates shall be kept intact, tight, and adjusted in accordance with manufacturer's specifications.
- (C) Cutting or piercing parts of can openers shall be kept sharp to minimize the creation of metal fragments that can contaminate FOOD when the container is opened.
- (D) Surfaces of EQUIPMENT, including but not limited to drawers and shelves, shall not be lined with aluminum foil, except for drip pans and back splashes of cooking EQUIPMENT, provided the foil is routinely replaced.
- (E) Surfaces, including but not limited to cutting blocks and cutting boards that are subject to scratching and scoring shall be resurfaced or discarded when they can no longer be effectively cleaned and sanitized.
- (F) Sinks, basins, WARE WASHING machines, or other receptacles used for washing and rinsing EQUIPMENT, UTENSILS, or raw FOOD shall be installed and maintained according to the manufacturer's specifications:
  - (1) Faucets shall be capable of shutting off water flow completely.
  - (2) Valves shall close tightly to prevent seepage.



- (3) Automated dispensing systems shall be located and maintained to prevent CONTAMINATION of clean items from leaks, drips, or spills of cleaning agents or other dispensed chemicals.

#### **4-204.12 Three-Compartment Sinks for WARE WASHING**

- (A) Monitoring water temperature and sanitizer concentration:
  - (1) A TEMPERATURE MEASURING DEVICE shall be provided and readily accessible for frequently measuring the temperature of water used for washing and sanitizing.
  - (2) Sanitizer test strips, a test kit, or other device that accurately measures the concentration in ppm of chemical sanitizers, shall be provided and readily accessible for frequently measuring the concentration of chemical sanitizing solutions.
- (B) Wash solution temperature: The temperature of the wash solution in manual WARE WASHING EQUIPMENT shall be maintained at not less than  $110^{\circ}\text{F}\pm 2^{\circ}$ , or at a temperature as specified by the manufacturer of the cleaning agent.
- (C) Hot water SANITIZATION temperature: If immersion in hot water is used for sanitizing in a manual operation, the temperature of the water shall be maintained at  $171^{\circ}\text{F}\pm 2^{\circ}$  or above.
- (D) Use of a three-compartment sink for cleaning and sanitizing: Cleaning and sanitizing of EQUIPMENT and UTENSILS, by means of a three-compartment sink, shall be accomplished by following the procedures listed in Section 4-404 of this Chapter for pre-cleaning, washing, rinsing, sanitizing, and air-drying.

#### **4-204.13 Hand-Held, Wand-Type, High Pressure Cleaning and Sanitizing Devices**

For high pressure systems with wand-type, hand-held spraying devices used for the in-place cleaning and high-temperature sanitizing of EQUIPMENT, including but not limited to MEAT saws, the temperature of the fresh hot water sanitizing rinse, as it enters the manifold, shall be at least  $180^{\circ}\text{F}\pm 2^{\circ}$ .

#### **4-204.14 WARE WASHING Machines**

- (A) Operation according to manufacturer's instructions and data plate:
  - (1) A WARE WASHING machine, and its auxiliary components, shall be operated in accordance with the machine's data plate and other manufacturer's instructions, including, but not limited as follows:
    - (a) A WARE WASHING machine's conveyor speed or automatic cycle times shall be maintained accurately timed in accordance with the manufacture's specifications.
    - (b) A WARE WASHING machine shall be repaired using factory authorized parts. All repairs shall restore the machine's operation to its original design, according to manufacturer's specifications. Factory authorized convertible machines shall be converted by factory authorized technicians, using the manufacturer's recommended procedures and parts.
    - (c) If an APPROVED chemical sanitizing machine is converted to an APPROVED high temperature sanitizing machine, adequate ventilation shall be provided to facilitate removal of steam and condensation.
    - (d) If an APPROVED high temperature sanitizing machine is converted to a chemical sanitizing machine, factory authorized pumps shall be installed to deliver the adequate amount of sanitizer.
    - (e) Adequate orifice size and construction material of spray nozzles shall be verified on every conversion or repair.
    - (f) The wash solution shall be maintained at the temperatures required in this section and free of excessive build up of debris.
    - (g) The sanitizer solutions shall be maintained clean and at required temperatures.
- (B) Drain boards and draining EQUIPMENT:

A WARE WASHING machine and its drain boards, or other EQUIPMENT used to supplement integral drain boards, shall be cleaned:

  - (1) Before use.
  - (2) Throughout the day at a frequency necessary to prevent re-CONTAMINATION of EQUIPMENT and UTENSILS, and to ensure that the EQUIPMENT performs its intended function.
- (C) Wash solution temperature:
  - (1) The temperature of the wash solution for spray-type ware washers, that use hot water to sanitize, shall not be less than:
    - (a)  $165^{\circ}\text{F}\pm 2^{\circ}$  for a stationary rack, single temperature machine.

- (b) 150°F±2° for a stationary rack dual temperature machine.
- (c) 160°F±2° for a single tank, conveyor dual temperature machine.
- (d) 150°F±2° for a multi-tank, conveyor multi-temperature machine.
- (2) The temperature of the wash solution in spray-type ware washers that use chemicals to sanitize may not be less than 120°F±2°.

(D) Cleaning agents:

When used for WARE WASHING, the mechanical ware washer shall contain a wash solution of soap, detergent, acid cleaner, alkaline cleaner, degreaser, abrasive cleaner, or other cleaning agent according to the cleaning agent manufacturer's label instructions.

(E) Hot water SANITIZATION temperature and pressure:

- (1) The temperature of the fresh hot water sanitizing rinse, as it enters the manifold of a WARE WASHING machine, shall not be more than 194°F±2°, or less than:
  - (a) 165°F±2° for a stationary rack, single temperature machine.
  - (b) 180°F±2° for all other machines.
- (2) The flow pressure of the fresh hot water sanitizing rinse in a WARE WASHING machine shall not be less than 15 pounds per square inch (psi) nor more than 25 psi as measured with a pressure gauge or similar device including but not limited to a transducer that measures and displays the water pressure:
  - (a) In increments not greater than 1 psi.
  - (b) With an accuracy of ±2 psi in the operational range (15-25 psi) as measured in the water line immediately downstream from the fresh hot water sanitizing rinse control valve.
  - (c) If the flow pressure measuring device is upstream of the fresh hot water sanitizing rinse control valve, the device shall be mounted in a 1/4" iron pipe size (IPS) valve.
- (3) Monitoring high temperature WARE WASHING machines: The temperature of a high-temperature WARE WASHING machine shall be frequently and accurately determined by an irreversible registering thermometer or a temperature-sensitive tape.

(F) Chemical sanitizer temperature and concentration:

- (1) APPROVED sanitizers: Only a chemical sanitizer as specified in *21 CFR 178.1010, Sanitizing Solutions*, and used in accordance with the EPA-APPROVED manufacturer's label instructions shall be used in a sanitizing solution for a WARE WASHING machine.
- (2) Chlorine sanitizers: A chlorine sanitizing solution for a WARE WASHING machine shall be applied at a concentration of at least 50 ppm, but not more than 100 ppm, or at a concentration as specified by the manufacturer.
- (3) Iodine sanitizers: An iodine sanitizing solution for a WARE WASHING machine shall have:
  - (a) A concentration of at least 12.5 ppm, but not more than 25 ppm, or at a concentration as specified by the manufacturer.
  - (b) A pH and temperature as specified by the manufacturer.
- (4) Quaternary ammonium sanitizers: A quaternary ammonium compound for use in a WARE WASHING machine shall be:
  - (a) Labeled by the manufacturer as suitable for use in a WARE WASHING machine
  - (b) Used only within the water temperature and water hardness limits as specified by the manufacturer.
- (5) Detergent sanitizers: If a detergent sanitizer is used where there is no distinct water rinse between the washing and sanitizing steps, the agent applied in the sanitizing step shall be the same detergent sanitizer that is used in the washing step.
- (6) Other APPROVED sanitizers: A sanitizer listed in *21 CFR 178.1010, Sanitizing Solutions*, but not covered under Section 4-204.14 (F) (1-5) of this Chapter shall be prepared and used in accordance with the manufacturer's directions included in the labeling. If a concentration or formulation not listed in *21 CFR 178.1010, Sanitizing Solutions*, is to be used, the PERMIT HOLDER shall demonstrate to the HEALTH AUTHORITY that the solution achieves effective SANITIZATION, and that sanitizer concentrations can be monitored by an accurate and easily usable method.
- (7) Monitoring chemical sanitizer concentration: The concentration of a chemical sanitizing solution shall be frequently and accurately determined by using a test kit or other APPROVED device.
- (8) Use of WARE WASHING machines for cleaning and sanitizing: Cleaning and sanitizing of EQUIPMENT and UTENSILS, using a WARE WASHING machine, shall be accomplished by following the procedures listed in Section 4-405.11 of this Chapter for pre-cleaning, washing, rinsing, sanitizing, and air-drying.

## 4-3 Utensils and Devices for Measuring or Testing

### Subparts

#### 4-301 Standards for Sanitation, and General Design and Construction Criteria

#### 4-302 Use of Utensils, Temperature Measuring Devices, and Testing Devices

#### 4-301 Standards for Sanitation, and General Design and Construction Criteria

##### 4-301.11 General Design and Construction of UTENSILS, and Measuring and Testing Devices

UTENSILS and measuring and testing devices shall meet the following criteria:

- (A) Multi-use UTENSILS, and measuring and testing devices, shall be:
- (1) Finished to have SMOOTH, EASILY CLEANABLE surfaces.
  - (2) Free of rough welds or joints, breaks, open seams, cracks, chips, inclusions, pits, and similar imperfections.
  - (3) Free of "V" type threads, and sharp internal angles, corners, and crevices.
  - (4) Accessible, without requiring disassembly by use of power tools or specialized hand tools, for cleaning and inspection.
  - (5) Made of materials that do not allow the migration of harmful substances, impart colors, odors, or tastes to FOOD and materials that are:
    - (a) Safe.
    - (b) Non-absorbent and made of CORROSION-RESISTANT MATERIAL.
    - (c) Durable and sufficient in weight and thickness to withstand repeated WARE WASHING.
    - (d) Resistant to pitting, chipping, crazing, scratching, scoring, distortion, and decomposition.
- (B) SINGLE-USE ARTICLES and SINGLE-SERVICE UTENSILS shall be:
- (1) Safe and clean.
  - (2) Made of materials that do not allow the migration of harmful substances or impart colors, odors, or tastes to FOOD.

##### 4-301.12 Standards for Sanitation

UTENSILS, and measuring and testing devices, that meet or exceed the standards for sanitation established by the *AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)*, shall be used in a Clark County FOOD ESTABLISHMENT.

##### 4-301.13 UTENSILS, and Measuring and Testing Devices not Certified for Sanitation

UTENSILS, and measuring and testing devices, not certified as meeting *NSF/ANSI* sanitation standards shall:

- (A) Comply with all general design and construction criteria as listed in Section 4-201.11 of this Chapter, or:
- (B) Not be used without prior written approval from the HEALTH AUTHORITY, which may include:
- (1) Requirements for, and results of, laboratory field testing.
  - (2) Specific use limitations based on identified RISK factors.

##### 4-301.14 Limited Uses of Materials not Compliant with *NSF/ANSI* Standards

UTENSILS made with materials that do not comply with general *NSF/ANSI* standards shall only be used in a FOOD ESTABLISHMENT for the following limited uses:

- (A) Cast iron may be present in a FOOD-CONTACT SURFACE of a UTENSIL that can be maintained clean, and in a rust-free condition.
- (B) Lead may be present in a FOOD-CONTACT SURFACE of a UTENSIL in:
- (1) Pewter alloys containing lead not in excess of 0.05%.
  - (2) Solder and flux containing lead not in excess of 0.2%.
  - (3) Ceramic, china, crystal UTENSILS, and decorative UTENSILS including but not limited to hand painted ceramic, or china with levels of lead not exceeding those listed in the following table.

UTENSIL Category	Description or Example	Maximum Lead, ppm*
Hot BEVERAGE Mugs	Coffee Mugs	0.5
Large Hollowware	Bowls greater than or equal to 1.16 quart (1.1L)	1.0
Small Hollowware	Bowls less than 1.16 quart (1.1L)	2.0
Flat UTENSILS	Plates, Saucers	3.0

\*1 ppm is equivalent to 1 mg/L

- (C) Copper and copper alloys, including but not limited to brass:
- (1) May be used as a FOOD-CONTACT SURFACE only in EQUIPMENT or UTENSILS that will not be in contact with a highly acidic FOOD including but not limited to vinegar, fruit JUICE, or wine.
  - (2) May be used in contact with beer brewing ingredients in the pre-fermentation and fermentation steps of a beer brewing operation including but not limited to a brew pub or microbrewery.
- (D) Metal UTENSILS, coated with porcelain or organic resins, shall comply with *NSF/ANSI* standards.

- (E) Wood and wood wicker shall not be used as a FOOD-CONTACT SURFACE for UTENSILS, except for hard maple or an equivalent hard, close-grained wood that is maintained in a SMOOTH and EASILY CLEANABLE condition or as specified in Section 4-201.15 (E) of this Chapter.
- (F) Glass sensors, or stems of FOOD TEMPERATURE MEASURING DEVICES, may be used if they are encased in a shatterproof coating, such as candy thermometers.

**4-302 Use of UTENSILS, TEMPERATURE MEASURING DEVICES, and Testing Devices**

**4-302.11 UTENSIL Maintenance and Repair or Replacement**

UTENSILS shall be maintained in a state of repair or condition that complies with the requirements in Section 4-201 of this Chapter, or shall be discarded.

**4-302.12 Availability of UTENSILS for Customer Self-Service**

- (A) A FOOD dispensing UTENSIL shall be available for each container displayed at a CONSUMER self-service unit including but not limited to a buffet or a salad bar.
- (B) Tethers for UTENSILS, used for bulk FOOD, shall be easily removable for cleaning.

**4-302.13 FOOD TEMPERATURE MEASURING DEVICES**

FOOD TEMPERATURE MEASURING DEVICES shall be:

- (A) Provided and readily accessible for use in ensuring attainment and maintenance of required FOOD temperatures.
- (B) Designed and sized appropriately for intended use.
- (C) Calibrated, to ensure their accuracy, in accordance with manufacturer's specifications

**4-302.14 Non-FOOD Temperature and Pressure Measuring Devices**

Measuring devices for monitoring ambient air temperature, water pressure, and water temperature shall be maintained in good repair and be accurate within the intended range of use.

**4-302.15 SINGLE-SERVICE ARTICLES and SINGLE-USE ARTICLES, Use Limitation**

SINGLE-SERVICE ARTICLES and SINGLE-USE ARTICLES shall not be re-used.

**4-302.16 Bulk Milk Container Dispensing Tubes, Method of Cutting**

To prevent accumulation of un-chilled milk, the bulk milk container dispensing tube shall be cut on the diagonal, at an angle of approximately 45°, leaving no more than 1" protruding from the chilled dispensing head.

**4-302.17 Molluscan and Crustacean Shells, Use Limitations**

Molluscan and crustacean shells shall not be used more than once as serving containers for FOOD.

**4-4 Cleaning and Sanitizing**

**Subparts**

- 4-401 Cleaning and Sanitizing**
- 4-402 General Methods**
- 4-403 Dry Methods**
- 4-404 Three-Compartment Sinks**
- 4-405 Ware Washing Machines**
- 4-406 Other Ware Washing Equipment**
- 4-407 Food Contact Equipment and Utensils**
- 4-408 Food Testing or Measuring Devices**
- 4-409 Returnables for Refilling**
- 4-410 Non Food-Contact Surfaces**

**4-401 Cleaning and Sanitizing**

**4-401.11 Frequency of Cleaning and Sanitizing FOOD-CONTACT SURFACES**

EQUIPMENT, FOOD-CONTACT SURFACES, and FOOD-CONTACT SURFACES of UTENSILS shall be maintained clean to sight and touch, and shall be cleaned and sanitized:

- (A) Each time there is a change from working with raw FOOD to working with READY-TO-EAT FOOD.
- (B) Between uses with raw fruits and vegetables and with POTENTIALLY HAZARDOUS FOOD (TCS).
- (C) Before using or storing a FOOD TEMPERATURE MEASURING DEVICE.
- (D) At any time during the operation when CONTAMINATION may have occurred.
- (E) Before each use with a different type of raw animal FOOD including but not limited to beef, FISH, lamb, pork, or POULTRY, except when used for a succession of different raw animal FOOD each requiring a higher cooking temperature than the previous FOOD, including but not limited to preparing raw FISH, followed by cutting raw POULTRY on the same cutting board.
- (F) When in use, at least every four hours except:
  - (1) FOOD-CONTACT SURFACES located in a room maintained at 50°F±2°, or less shall be cleaned and sanitized at least every 16 hours.

- (2) UTENSILS and EQUIPMENT used to prepare FOOD in a refrigerated room or area that is maintained at one of the temperatures in the following chart, and:
  - (a) The UTENSILS and EQUIPMENT are cleaned at the frequency that corresponds to the temperature.
  - (b) The cleaning frequency based on the ambient temperature of the refrigerated room, or area, is documented in the FOOD ESTABLISHMENT.

Temperature	Cleaning Frequency
41°F±2° or less	24 hours
>41°F-45°F±2°	20 hours
>45°F-50°F±2°	16 hours
>50°F-55°F±2°	10 hours

- (3) Containers in serving situations including but not limited to salad bars, delis, and cafeteria lines that hold READY-TO-EAT PHF (TCS) maintained at temperatures as specified in Chapter 3 of these Regulations shall be cleaned and sanitized every 24 hours.
- (4) TEMPERATURE MEASURING DEVICES that are maintained in contact with FOOD including but not limited to when left in a container of deli FOOD, or in a roast, and held at temperatures specified in Chapter 3 of these Regulations, shall be cleaned and sanitized whenever the FOOD container is cleaned and sanitized.
- (5) EQUIPMENT used for storage of PACKAGED or UNPACKAGED FOOD, including but not limited to a reach-in refrigerator, shall be cleaned at a frequency necessary to preclude accumulation of soil residues.
- (6) CIP EQUIPMENT shall be cleaned and sanitized in accordance with the methods and frequency specified by the manufacturer, or more frequently if necessary to maintain the EQUIPMENT in a sanitary condition.
- (7) Surfaces of UTENSILS and EQUIPMENT in contact with FOOD that are not potentially HAZARDOUS shall be cleaned:
  - (a) At least every 24 hours for iced tea dispensers and CONSUMER self-service UTENSILS including but not limited to tongs, scoops, or ladles.
  - (b) Before restocking CONSUMER self-service EQUIPMENT and UTENSILS including but not limited to CONDIMENT dispensers and display containers.
  - (c) EQUIPMENT including but not limited to ice bins and BEVERAGE dispensing nozzles, and enclosed components of EQUIPMENT including but not limited to ice makers, cooking oil storage tanks and distribution lines, BEVERAGE and syrup dispensing lines or tubes, and coffee bean grinders:
    - (i) At a frequency specified by the manufacturer.
    - (ii) Absent manufacturer specifications, at a frequency necessary to prevent accumulation of soil or mold.
- (8) The FOOD-CONTACT SURFACES of baking EQUIPMENT, and cooking EQUIPMENT and pans, shall be cleaned at least every 24 hours or more frequently if necessary to prevent development of encrusted grease deposits and other soil accumulations.

**4-402 General Methods**

**4-402.11 Cleaning and Sanitizing FOOD-CONTACT SURFACES – This Section mirrors the Food Code**

- (A) Sponges and Abrasive Cleaning Articles:
  - (1) Sponges shall not be used for cleaning FOOD-CONTACT SURFACES, EQUIPMENT, or UTENSILS in a FOOD ESTABLISHMENT.
  - (2) Abrasive articles shall not be used to clean non-stick cook ware or KITCHENWARE that has a non-stick resin coating, including but not limited to frying pans, griddles, sauce pans, cookie sheets, and waffle bakers.
- (B) EQUIPMENT, FOOD-CONTACT SURFACES, and UTENSILS shall be effectively washed, rinsed, sanitized, and air-dried by using manual or mechanical means as follows:
  - (1) Pre-cleaning and washing of soiled EQUIPMENT and UTENSILS:
    - (a) FOOD debris on EQUIPMENT and UTENSILS shall be scraped over a waste separator unit or garbage receptacle, or shall be removed in a WARE WASHING machine with a pre-wash cycle.
    - (b) If necessary for effective cleaning, soiled UTENSILS and EQUIPMENT shall be pre-flushed, pre-soaked, or scrubbed with abrasives that will not damage the surface.

- (c) Soiled FOOD-CONTACT SURFACES of EQUIPMENT and UTENSILS shall be washed by procedures including but not limited to application of detergents containing wetting agents and emulsifiers, acid, alkaline, or abrasive cleaners, hot water, brushes, scouring pads, high pressure sprays, or ultrasonic devices that are appropriate for the type of soil to be removed, and for the type and purpose of the EQUIPMENT or UTENSIL.
- (2) Rinsing of washed EQUIPMENT and UTENSILS:
- (a) Washed UTENSILS and EQUIPMENT shall be rinsed so that abrasives and cleaning chemicals are removed.
  - (b) Water used for rinsing shall be changed at a frequency that prevents grease, cleaning agents, or FOOD debris from remaining on the rinsed items.
- (3) Sanitizing of washed and rinsed EQUIPMENT and UTENSILS:  
After being washed and rinsed, FOOD-CONTACT SURFACES of EQUIPMENT and UTENSILS shall be sanitized by APPROVED manual or mechanical methods, using one of the sanitizers listed in *21 CFR 178.1010, Sanitizing Solutions*, and used as follows:
- (a) Chlorine sanitizers: A chlorine sanitizing solution shall be applied at a concentration of at least 50 ppm or a concentration as specified by the manufacturer.
  - (b) Iodine Sanitizers: An iodine sanitizing solution shall have a:
    - (i) Concentration of at least 12.5 ppm, and not more than 25 ppm.
    - (ii) pH and temperature as specified by the manufacturer.
  - (c) Quaternary Ammonium Sanitizers: A quaternary ammonium compound shall:
    - (i) Be applied at a concentration as specified by the manufacturer.
    - (ii) Be used only within the water temperature and water hardness limits as specified by the manufacturer.
    - (iii) Not be used in a WARE WASHING machine unless the manufacturer's label specifies such use.
  - (d) Applied at the concentration as specified in the current Food Code.
  - (e) Detergent Sanitizers: If a detergent sanitizer is used without a distinct water rinse between the washing and sanitizing steps, the agent applied in the sanitizing step shall be the same detergent sanitizer that is used in the washing step.
  - (f) Other APPROVED Sanitizers: A sanitizer listed in *21 CFR 178.1010, Sanitizing Solutions*, but is not covered in Section 4-402.11 (B) (3) (a-d) of this Chapter, shall:
    - (i) Be applied in accordance with the manufacturer's use directions included in the labeling.
    - (ii) Provide effective SANITIZATION. The PERMIT HOLDER shall demonstrate to the HEALTH AUTHORITY that the solution can be monitored by an accurate and easily usable method.
4. Time of exposure to sanitizers:
- (a) For sanitizing in a three-compartment sink, washed and rinsed items shall be immersed in an APPROVED sanitizer solution for at least 30 seconds or as specified by the manufacturer.
  - (b) For sanitizing in a WARE WASHING machine, items shall be exposed to the sanitizing solution for a time interval as specified on the data plate or as specified by the manufacturer.
  - (c) For sanitizing by other manual operations, including the application of sanitizing solutions by manual swabbing, brushing, or pressure spraying methods, contact with an APPROVED sanitizing solution shall be for at least 30 seconds, or as specified by the manufacturer, or at a lesser time interval that has been documented by laboratory data as yielding effective SANITIZATION.
5. Monitoring chemical sanitizer concentration:  
The concentration of a chemical sanitizing solution shall be frequently and accurately determined by using sanitizer test strips, a test kit, or other device.

#### **4-403 Dry Methods**

##### **4-403.11 Cleaning**

Dry methods for cleaning shall be used only for surfaces not used for PHF (TCS), and:

- (A) If used, dry cleaning methods including but not limited to brushing, scraping, and vacuuming shall contact only surfaces that are soiled with dry FOOD residues that are not POTENTIALLY HAZARDOUS.

- (B) Cleaning EQUIPMENT, used in dry cleaning FOOD-CONTACT SURFACES, shall not be used for any other purpose.

#### **4-404 Three-Compartment Sinks**

##### **4-404.11 Cleaning and Sanitizing Procedures**

(A) Use Limitations:

- (1) A three-compartment sink shall not be used at any time for hand washing.
  - (2) If a three-compartment sink is used for WARE WASHING, as well as to wash produce or to thaw FOOD, the sink shall be:
    - (a) Cleaned at least every 24 hours, and before each use for WARE WASHING, and throughout the day at a frequency necessary to prevent re-CONTAMINATION of EQUIPMENT and UTENSILS, and to ensure that the EQUIPMENT performs its intended function.
    - (b) Sanitized as specified in Section 4-402.11 (B) (3) of this Chapter before and after using the sink to thaw FOOD or to wash produce.
    - (c) For WARE WASHING;
      - (i) The wash solution shall be maintained at the temperatures required in this section and free of excessive build up of debris.
      - (ii) The sanitizer solutions shall be maintained clean and at required temperatures.
- (B) Whenever a three-compartment sink is used for FOOD preparation, including the thawing of FROZEN FOOD, all compartments and drain boards must be cleaned and sanitized prior to use. During the time a three-compartment sink is being used for FOOD preparation, it may not be used for any other purpose.
- (C) Cleaning and sanitizing of EQUIPMENT and UTENSILS: Pre-cleaning, washing, rinsing, and sanitizing in a three-compartment sink shall be accomplished using methods in Section 4-402.11 of this Chapter.
- (D) Maintaining clean wash, rinse, and sanitizing solutions: The wash and rinse compartments in a three-compartment sink shall be changed when substantial amounts debris and grease have accumulated. The sanitizing solutions in a three-compartment sink shall be maintained clean for WARE WASHING.
- (E) Temperature of wash and sanitizing solutions:
  - (1) The temperature of the wash solution for manual WARE WASHING shall be maintained at not less than  $110^{\circ}\text{F}\pm 2^{\circ}$ , or at a temperature specified on the manufacturer's label of the cleaning agent.
  - (2) If immersion in hot water is used for sanitizing, the temperature of the sanitizing water shall be maintained at  $171^{\circ}\text{F}\pm 2^{\circ}$ , or above.
- (F) Air drying of cleaned and sanitized EQUIPMENT and UTENSILS: EQUIPMENT or UTENSILS that have been properly sanitized, as specified in Section 4-402.11 (B) of this Chapter:
  - (1) Shall be air dried, or may be used after adequate draining has occurred, before contact with FOOD.
  - (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.
  - (3) Clean TABLEWARE may be polished with a clean damp cloth used solely for that purpose.

#### **4-405 WARE WASHING Machines**

##### **4-405.11 Cleaning and Sanitizing Procedures**

(A) Pre-cleaning of soiled EQUIPMENT and UTENSILS:

- (1) For cleaning and sanitizing EQUIPMENT and UTENSILS by use of a WARE WASHING machine, FOOD debris shall be:
    - (a) Scraped into a waste separator unit or a garbage receptacle.
    - (b) Removed in a pre-wash cycle of the WARE WASHING machine.
  - (2) If necessary for effective cleaning, soiled UTENSILS and EQUIPMENT shall be pre-flushed, pre-soaked, or scrubbed with abrasives that will not damage the surface.
- (B) Loading of soiled items: Soiled items to be cleaned in a WARE WASHING 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.
  - (2) Allows the items to drain.
- (C) Maintenance of wash solution temperature: Wash solution temperature shall be maintained as specified for the type of machine being used:
  - (1) In spray type ware washers that use hot water to sanitize, the temperature of the wash solution shall not be less than:
    - (a)  $165^{\circ}\text{F}\pm 2^{\circ}$  for a stationary rack, single temperature machine.
    - (b)  $150^{\circ}\text{F}\pm 2^{\circ}$  for a stationary rack, dual temperature machine.
    - (c)  $160^{\circ}\text{F}\pm 2^{\circ}$  for a single tank, conveyor, dual temperature machine.
    - (d)  $150^{\circ}\text{F}\pm 2^{\circ}$  for a multi-tank, conveyor, multi-temperature machine.

- (2) In spray type ware washers that use chemicals to sanitize, the temperature of the wash solution shall not be less than  $120^{\circ}\text{F}\pm 2^{\circ}$ .
- (D) Maintenance of fluid reservoirs and pumping/tubing systems: Reservoirs and pumping/tubing systems shall be maintained to deliver whatever water conditioners, cleaning agents, and chemical sanitizers as specified by the WARE WASHING machine manufacturer, and at concentrations as specified in these Regulations, or on the product's label.
- (E) Temperature and pressure of water for hot water SANITIZATION:
  - (1) Cycling time, and water temperature, shall result in the surfaces of UTENSILS reaching at least  $160^{\circ}\text{F}\pm 2^{\circ}$ , as measured by an irreversible registering thermometer, or temperature-sensitive tape, which has traveled through the cleaning and sanitizing cycle with the UTENSILS.
  - (2) The temperature of the fresh hot water sanitizing rinse, as it enters the manifold, shall not be more than  $194^{\circ}\text{F}\pm 2^{\circ}$ , nor less than:
    - (a)  $165^{\circ}\text{F}\pm 2^{\circ}$  for a stationary rack, single temperature machine.
    - (b)  $180^{\circ}\text{F}\pm 2^{\circ}$  for all other machines.
  - (3) The flow pressure of the fresh hot water sanitizing rinse in a WARE WASHING machine may not be less than 15 psi nor more than 25 psi as measured with a pressure gauge or similar device including but not limited to a transducer that measures and displays the water pressure:
    - (a) In increments not greater than 1 psi.
    - (b) With an accuracy of  $\pm 2$  psi in the operational range (15-25 psi), as measured in the water line immediately downstream from the fresh hot water sanitizing rinse control valve.
    - (c) If the flow pressure measuring device is upstream of the fresh hot water sanitizing rinse control valve, the device shall be mounted in a 1/4" Iron Pipe Size (IPS) valve.
- (F) Concentration of Chemical Sanitizer: Chemical sanitizer concentrations shall be maintained as specified on the product label or as specified in Section 4-402.11 (B) of this Chapter.
- (G) Air drying of cleaned and sanitized EQUIPMENT and UTENSILS: EQUIPMENT or UTENSILS that have been properly sanitized as specified in Section 4-402.11 (B) (3) of this Chapter.
  - (1) Shall be air dried, or may be used after adequate draining has occurred, before contact with FOOD.
  - (2) Shall not be cloth dried except that UTENSILS that have been air dried may be polished with cloths that are maintained clean and dry.
  - (3) Clean TABLEWARE may be polished with a clean damp cloth used solely for that purpose.

**4-406 Other WARE WASHING EQUIPMENT**

**4-406.11 Cleaning and Sanitizing Procedures**

If washing in sink compartments or a WARE WASHING machine is impractical, including but not limited to when the EQUIPMENT is fixed, or the UTENSILS are too large, washing shall be done by using alternative manual WARE WASHING EQUIPMENT in accordance with the following procedures:

- (A) EQUIPMENT shall be disassembled as necessary to allow access of the detergent solution to all FOOD-CONTACT SURFACES.
- (B) EQUIPMENT components and UTENSILS shall be scraped or rough cleaned to remove FOOD particle accumulation.
- (C) EQUIPMENT and UTENSILS shall be washed as specified in Section 4-402.11 of this Chapter.

**4-407 FOOD Contact EQUIPMENT and UTENSILS**

**4-407.11 Sanitizing Procedures**

- (A) EQUIPMENT and UTENSILS that are used repeatedly for contact with FOOD shall be:
  - (1) Replaced, or washed, rinsed, sanitized, and air dried, at a frequency as specified in Section 4-401.11 of this Chapter.
  - (2) Wiped with a clean, sanitized cloth whenever time does not permit effective air drying before the next use. Sanitized cloths shall test at APPROVED concentrations when not stored in a sanitizer solution.
- (B) Sanitizer solutions for use with in-use EQUIPMENT and UTENSILS shall be:
  - (1) Prepared at a frequency that maintains APPROVED sanitizer concentrations as verified by the use of the appropriate test strip.
  - (2) Held in a working containers that are clearly and durably labeled in English with the common name of the material in accordance with Chapter 7-102.11 of these Regulations. Other applicable languages may be used in addition to the English name.



- (3) Stored:
  - (a) In APPROVED buckets or spray bottles.
  - (b) Where spills, splashes, and sprays will not cause CONTAMINATION of FOOD or FOOD-CONTACT SURFACES.
- (4) Used in accordance with exposure times as specified in Section 4-402.11 (B) (4) of this Chapter.

**4-408 FOOD Testing or Measuring Devices**

**4-408.11 Probe or Measuring Device Sanitizing Procedures**

Before and after each use, FOOD-contact probes or thermometers and other FOOD testing and measuring devices shall be wiped with an APPROVED sanitizer and air dried. For this purpose only, swabs containing 70% ethyl alcohol or isopropyl alcohol may be used as a sanitizer.

**4-409 Returnables for Refilling**

**4-409.11 Cleaning and Sanitizing Procedures**

Returned empty containers that are to be refilled for the sale of non-POTENTIALLY HAZARDOUS BEVERAGES:

- (A) Shall be cleaned, rinsed, and sanitized in a FOOD PROCESSING ESTABLISHMENT if the container is to be reSEALED to make the FOOD PRE-PACKAGED. Examples include, but are not limited to, glass bottles to be refilled with beer, water, or soft drinks.
- (B) May, if the container is free of visible dirt or FOOD residue, be refilled for immediate return to the customer, provided that the act of refilling does not pose a RISK of CONTAMINATION in the FOOD service area. Examples include, but are not limited to:
  - (1) Cups to be refilled at customer request with coffee or soft drinks.
  - (2) “Growlers” or other containers to be refilled at customer request with beer.
  - (3) Containers provided by customers for refilling with water at self-service VENDING MACHINES.

**4-410 NON FOOD-CONTACT SURFACES**

**4-410.11 Cleaning Procedures**

NON FOOD-CONTACT SURFACES of EQUIPMENT and UTENSILS shall be kept free of an accumulation of dust, dirt, FOOD residue, and other debris, and shall be cleaned at a frequency necessary to prevent accumulation of soil residues.

**4-5 Laundering**

**Subparts**

- 4-501 Clean Linen**
- 4-502 Soiled Linen**
- 4-503 Frequency**
- 4-504 Method of Washing**
- 4-505 Facilities**

**4-501 Clean LINEN**

**4-501.11 Maintenance**

Clean LINEN shall be free from FOOD residues and other soiling matter.

**4-502 Soiled LINEN**

**4-502.11 Handling**

- (A) Wiping cloths shall be removed from use when they have become contaminated, visibly soiled, or sticky.
- (B) Cloth gloves used as specified in Chapter 3-304.15 (D) of these Regulations shall not be used with more than one type of raw animal FOOD, including but not limited to beef, lamb, pork, or FISH before being discarded for LAUNDERing.
- (C) LINEN and napkins that are used as specified in Chapter 3-304.13 of these Regulations and cloth napkins shall be used only once before being discarded for LAUNDERing.
- (D) Soiled LINEN 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 ARTICLES and SINGLE-USE ARTICLES.

**4-503 Frequency**

**4-503.11 LAUNDERing**

- (A) LINEN that does not come in direct contact with FOOD shall be LAUNDERed between operations when they become wet, sticky, or visibly soiled.
- (B) Cloth gloves used as specified in Chapter 3-304.15 (D) of these Regulations shall be LAUNDERed before being used with a different type of raw animal FOOD including but not limited to beef, lamb, pork, or FISH.

- (C) LINEN and napkins that are used, as specified in Chapter 3-304.13 of these Regulations, and cloth napkins shall be LAUNDERed between each use.
- (D) Wet wiping cloths shall be LAUNDERed daily.
- (E) Dry wiping cloths shall be LAUNDERed as necessary to prevent CONTAMINATION of FOOD and clean serving UTENSILS.

**4-504 Method of Washing**

**4-504.11 Mechanical Washing**

LINEN shall be mechanically washed.

**4-505 Facilities**

**4-505.11 Use of Laundry Facilities**

- (A) Laundry facilities within a FOOD ESTABLISHMENT shall not be used for washing and drying items that are not used in the operation of the establishment.
- (B) Separate laundry facilities that provide general LAUNDERing for other types of establishments, including but not limited to hotels and casinos, may also be used for LAUNDERing FOOD ESTABLISHMENT items.
- (C) Washers and dryers used to LAUNDER wiping cloths or LINEN, shall be cleaned, if used, at least every 24 hours, and:
  - (1) Before use.
  - (2) Throughout the day at a frequency necessary to prevent re-CONTAMINATION of EQUIPMENT and UTENSILS.

**4-6 Protection of Clean Items**

**Subparts**

**4-601 Drying**

**4-602 Lubricating and Reassembling**

**4-603 Storing**

**4-604 Preventing Contamination**

**4-601 Drying**

**4-601.11 EQUIPMENT, UTENSILS, and LINEN Air Drying Required**

- (A) EQUIPMENT and UTENSILS and LINEN that have been properly sanitized, as specified in Section 4-402.11 (B) (3) of this Chapter and in *40 CFR 180.940*:
  - (1) Shall be air dried or may be used after adequate draining has occurred before contact with FOOD.
  - (2) Shall not be cloth dried except that TABLEWARE that has been air dried may be polished with cloths that are maintained clean and dry. Other procedures for polishing TABLEWARE may be submitted to the HEALTH AUTHORITY for approval.
- (B) LAUNDERed wiping cloths shall be:
  - (1) Stored in a dry condition.
  - (2) Stored in a sanitizing solution for use at the workstation.

**4-602 Lubricating and Reassembling**

**4-602.11 FOOD-CONTACT SURFACES and EQUIPMENT**

- (A) Only lubricants that are FOOD GRADE, as specified in Chapter 7-205.11 of these Regulations, shall be applied to FOOD-CONTACT SURFACES.
- (B) EQUIPMENT shall be reassembled so that FOOD-CONTACT SURFACES are not contaminated after cleaning and sanitizing.

**4-603 Storing**

**4-603.11 Cleaned EQUIPMENT, UTENSILS, and LINEN**

- (A) Cleaned EQUIPMENT and UTENSILS, LAUNDERed LINEN, and SINGLE-SERVICE and SINGLE-USE ARTICLES shall be stored in a clean, dry location where they are not exposed to splash, dust, or other CONTAMINATION.
- (B) KITCHENWARE and UTENSILS that are clean and dry shall be stored covered or inverted.
- (C) Cleaned and sanitized EQUIPMENT, UTENSILS, LAUNDERed LINEN, and SINGLE-SERVICE and SINGLE-USE ARTICLES shall not be stored:
  - (1) In locker rooms.
  - (2) In toilet rooms.
  - (3) In garbage rooms.
  - (4) In mechanical rooms.
  - (5) Under sewer lines that are not shielded to intercept potential drips.

- (6) Under leaking water lines including leaking automatic fire sprinkler heads, or under lines on which water has condensed.
  - (7) Under open stairwells containing steps which are not fully enclosed with backs and sides to prevent debris from falling onto the items stored below the open stairwell.
  - (8) Under other sources of CONTAMINATION.
- (D) Cleaned EQUIPMENT and UTENSILS, LAUNDERED LINEN, and SINGLE-SERVICE and SINGLE-USE ARTICLES shall be stored at least 6" above the floor, except that items that are kept in closed packages may be stored for transport on EASILY MOVEABLE dollies, pallets, racks, and skids that are less than 6" thick.

**4-604 Preventing CONTAMINATION**

**4-604.11 Handling Cleaned EQUIPMENT, UTENSILS, and LINEN**

- (A) 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.
- (B) TABLEWARE that is preset shall be protected from CONTAMINATION by being wrapped, covered or inverted.
- (C) Plastic tubing used to dispense BEVERAGES directly into a CONSUMER's mouth, including but not limited to beer bongs at bars, shall be for SINGLE-SERVICE only, or shall be washed, rinsed, and sanitized between customers.

**4-604.12 Handling Soiled TABLEWARE**

Soiled TABLEWARE shall be removed from CONSUMER eating and drinking areas and handled so that clean TABLEWARE is not contaminated.

**4-604.13 Handling Clean TABLEWARE**

If TABLEWARE is preset:

- (A) Exposed, unused settings shall be removed when a CONSUMER is seated; or,
- (B) Exposed, unused settings shall be cleaned and sanitized before further use if the settings are not removed when a customer is seated.

**4-604.14 Handling SINGLE-SERVICE ARTICLES**

- (A) Knives, forks, and spoons that are not pre-wrapped shall be presented so that only the handles are touched by employees and by CONSUMERS, if CONSUMER self-service is provided.
- (B) SINGLE-SERVICE ARTICLES, that have no handles, including but not limited to toothpicks and straws, and 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.
- (C) SINGLE-SERVICE ARTICLES and SINGLE-USE ARTICLES shall be kept in the original protective package or stored by using other means that afford protection from CONTAMINATION until removed for use.