	7.3.2.1.7	Fish and Molluscan Shellfish Sources:	15	C
fish/molluscan shellfish		(1) Fish that are received for service shall be commercially and legally caught or harvested or otherwise approved for service by the VSP.		
no recreational caught		(2) Molluscan shellfish that are recreationally caught may not be received for service.		
certified source		(3) Molluscan shellfish shall be obtained from sources according to law and the requirements specified in the U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration, National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish or equivalent standards; and received in interstate commerce shall be from sources that are listed in the FDA Interstate Certified Shellfish Shippers List or equivalent foreign certified shellfish listing.		
wild mushrooms	7.3.2.1.8	Mushroom species picked in the wild shall be obtained from sources where each mushroom is individually inspected and found to be safe by an approved mushroom identification expert. *This requirement does not apply to:*	15	C
		(1) Cultivated wild mushroom species that are grown, harvested, and processed in an operation that is regulated by the food regulatory agency that has jurisdiction over the operation; or		
		(2) Wild mushroom species if they are in packaged form and are the product of a food-processing plant that is regulated by the food regulatory agency that has jurisdiction over the plant.		
game animals	7.3.2.1.9	If game animals are received for sale or service they shall be:	15	C
commercially raised		(1) Commercially raised for food and raised, slaughtered, and processed under law; or		
inspection program		(2) Under a voluntary inspection program administered by the USDA for game animals such as exotic animals (reindeer, elk, deer, antelope, water buffalo, or bison) that are inspected and approved in accordance with 9 CFR 352 Voluntary Exotic Animal Program or rabbits that are "inspected and certified" in accordance with 9 CFR 354 Rabbit Inspection Program.		
endangered species		(3) A game animal may not be received for service if it is a species of wildlife that is listed in 50 CFR 17 Endangered and Threatened Wildlife and Plants.		

7.3.2.2 Receiving Condition

receiving temperatures

7.3.2.2.1 Receiving temperatures shall be as follows: **16 C**

(1) Refrigerated, potentially hazardous food shall be at a temperature of 7°C (45°F) or below when received.

(2) *If a temperature other than 7°C (45°F) for a potentially hazardous food is specified in law governing its distribution, such as laws governing milk, molluscan shellfish, and shell eggs, the food may be received at the specified temperature.*

(3) Potentially hazardous food that is cooked and received hot shall be at a temperature of 60°C (140°F) or above.

(4) A food that is labeled frozen and shipped frozen by a food-processing plant shall be received frozen.

(5) Upon receipt, potentially hazardous food shall be free of evidence of previous temperature abuse.

food additives

7.3.2.2.2 Food may not contain unapproved food additives or additives that exceed amounts specified in law. **15 C**

shell eggs

7.3.2.2.3 Shell eggs shall be received clean and sound and may not exceed the restricted egg tolerances specified in law. **15 C**

egg and milk products

7.3.2.2.4 Eggs and milk products shall be received as follows: **15 C**

egg products

(1) Liquid, frozen, and dry eggs and egg products shall be obtained pasteurized.

milk products

(2) Fluid and dry milk and milk products complying with Grade A standards as specified in law shall be obtained pasteurized.

frozen milk

(3) Frozen milk products, such as ice cream, shall be obtained pasteurized as specified in 21 CFR 135 Frozen Desserts.

cheese

(4) Cheese shall be obtained pasteurized unless alternative procedures to pasteurization are specified in the CFR, such as 21 CFR 133 Cheeses and Related Cheese Products, for curing certain cheese varieties.

package integrity	7.3.2.2.5	Food packages shall be in good condition and protect the integrity of the contents so that the food is not exposed to adulteration or potential contaminants. Canned goods with dents on end or side seams may not be used.	15	C
ice	7.3.2.2.6	Ice for use as a food or a cooling medium shall be made from drinking water.	15	C
shucked shellfish	7.3.2.2.7	Raw shucked shellfish shall be obtained in nonreturnable packages which bear a legible label as specified in the National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish.	15	C
shellstock shellfish	7.3.2.2.8	Shellstock shall be obtained in containers bearing legible source identification tags or labels that are affixed by the harvester and each dealer that depurates, ships, or reships the shellstock, as specified in the National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish.	15	C
shellstock condition	7.3.2.2.9	Shellstock shall be reasonably free of mud, dead shellfish, and shellfish with broken shells when received by a vessel. Dead shellfish or shellstock with badly broken shells shall be discarded.	19	
	7.3.2.3	**Maintaining Molluscan Shellfish Identification**		
shucked identification	7.3.2.3.1	Shucked molluscan shellfish may not be removed from the container in which they are received other than immediately before preparation for service.	15	C
shellstock identification	7.3.2.3.2	Shellstock shellfish tags shall:	15	C
attached		(1) Remain attached to the container in which the shellstock are received until the container is empty.		
retained 90 days		(2) Be maintained by retaining shellstock tags or labels for 90 calendar days from the date the container is emptied by using an approved record keeping system that keeps the tags or labels in chronologic order correlated to the date when the shellstock are served.		

7.3.3 Food Protection

7.3.3.1 Employee Contamination

wash hands	7.3.3.1.1	Food employees shall wash their hands.	12	C
R. T – hand contact prohibited	7.3.3.1.2	*Except when washing fruits and vegetables or when otherwise approved*, food employees may not contact exposed, ready-to-eat food with their bare hands and shall use suitable utensils such as deli tissue, spatulas, tongs, single-use gloves, or dispensing equipment.	12	C
not RTE contact minimized	7.3.3.1.3	Food employees shall minimize bare hand and arm contact with exposed food that is not in a ready-to-eat form.	12	C
tasting	7.3.3.1.4	A food employee shall not use a utensil more than once to taste food that is to be served.	12	C

7.3.3.2 Food and Ingredient Contamination

cross-contamination	7.3.3.2.1	Food shall be protected from cross-contamination by:	18	C
raw animal foods		(1) Physically separating raw animal foods during storage, preparation, holding, and display from raw ready-to-eat food including other raw animal food such as fish for sushi or molluscan shellfish, or other raw ready-to-eat food such as vegetables, and cooked ready-to-eat food; so products do not physically touch, and so as to prevent dripping of one product into another;		
different species		(2) *Except when combined as ingredients*, separating types of raw animal foods from each other such as beef, fish, lamb, pork, and poultry during storage, preparation, holding, and display by using separate equipment for each type, or arranging each type of food in equipment so that cross-contamination of one type with another is prevented, and preparing each type of food at different times or in separate areas;		
cleaning/ sanitizing		(3) Cleaning and sanitizing equipment and utensils;		
packaging/container		(4) Storing the food in packages, covered containers, or wrappings;		
cleaning containers		(5) Cleaning hermetically sealed containers of food of visible soil before opening;		
protecting containers		(6) Protecting food containers that are received packaged together in a case or overwrap from cuts when the case or overwrap is opened;		
damaged/				

spoiled

(7) Separating damaged, spoiled, or recalled food being held on the vessel; and

raw/RTE vegetables

(8) Separating fruits and vegetables, before they are washed, from ready-to-eat food.

7.3.3.2.2 *Storing the food in packages, covered containers, or wrappings does not apply to:*

(1) Whole, uncut, raw fruits and vegetables and nuts in the shell, that require peeling or hulling before consumption;

(2) Primal cuts, quarters, or sides of raw meat or slab bacon that are hung on clean, sanitized hooks or placed on clean, sanitized racks;

(3) Whole, uncut, processed meats such as country hams, and smoked or cured sausages that are placed on clean, sanitized racks;

(4) Food being cooled; or

(5) Shellstock.

container identif.

7.3.3.2.3 Working containers holding food or food ingredients that are removed from their original packages for use on the vessel, such as cooking oils, flour, herbs, potato flakes, salt, spices, and sugar shall be identified with the common name of the food. *Containers holding food that can be readily and unmistakably recognized such as dry pasta need not be identified.* 19

pasteurized eggs

7.3.3.2.4 Pasteurized eggs or egg products shall be substituted for raw shell eggs in the preparation of foods such as Caesar salad, hollandaise, or Béarnaise sauce, mayonnaise, eggnog, ice cream, and egg-fortified beverages or dessert items that are not cooked. 18 C

wash fruits/ vegetables

7.3.3.2.5 Raw fruits and vegetables shall be thoroughly washed in water to remove soil and other contaminants before being cut, combined with other ingredients, cooked, served, or offered for human consumption in ready-to-eat form. 19

vegetable washes

7.3.3.2.6 *Fruits and vegetables may be washed by using chemicals specified under 21 CFR 173.315.*

7.3.3.3 Ice as Coolant

ice used as a coolant 7.3.3.3.1 After use as a medium for cooling the exterior surfaces of food such as melons or fish, packaged foods such as canned beverages or cooling coils and tubes of equipment, ice may not be used as food. 19

coolant 7.3.3.3.2 Packaged food may not be stored in direct contact with ice or water if the food is subject to the entry of water because of the nature of its packaging, wrapping, or container, or its positioning in the ice or water. 19

undrained ice 7.3.3.3.3 Except as specified below, unpackaged food may not be stored in direct contact with undrained ice. 19

raw fruit/ vegetables 7.3.3.3.4 *Whole, raw fruits or vegetables; cut, raw vegetables such as celery or carrot sticks, or cut potatoes; and tofu may be immersed in ice or water.*

raw chicken/ fish 7.3.3.3.5 *Raw chicken and raw fish that are received immersed in ice in shipping containers may remain in that condition while in storage awaiting preparation, display, or service.*

ongoing meal service 7.3.3.3.6 *Other unpackaged foods in a raw, cooked, or partially cooked state may be immersed in ice as part of an ongoing meal service process, such as liquid egg product, individual eggs, pasta, and reconstituted powdered mixes.*

7.3.3.4 Equipment, Utensils, and Linens

cleaned/ sanitized 7.3.3.4.1 Food shall only contact surfaces of equipment and utensils that are cleaned and sanitized. 26 C

storage during use 7.3.3.4.2 During pauses in food preparation or dispensing, food preparation and dispensing utensils shall be stored: 19

handles out (1) In the food with their handles above the top of the food and the container;

storage bins (2) In food that is not potentially hazardous with their handles above the top of the food within containers or equipment that can be closed, such as bins of sugar, flour, or cinnamon;

clean surfaces (3) On a clean portion of the food preparation table or cooking equipment only if the in-use utensil and the food-contact surface of the food preparation table or cooking equipment are cleaned and sanitized at least every four hours;

running water (4) In running water of sufficient velocity to flush particulates to

the drain, if used with moist food such as ice cream or mashed potatoes;

ice scoops

(5) In a clean, protected location if the utensils, such as ice scoops, are used only with a food that is not potentially hazardous; or

heated water

(6) In a container of water if the water is maintained at a temperature of at least 60°C (140°F) and the container is frequently cleaned and sanitized.

linen/ napkins 7.3.3.4.3 Linens and napkins may not be used in contact with food *unless they are used to line a container for the service of foods and the linens and napkins are replaced each time the container is refilled for a new consumer.* 19

wiping cloths 7.3.3.4.4 Wiping cloths shall be restricted to the following: 25

no other purpose

(1) Cloths that are in use for wiping food spills shall be used for no other purpose.

dry or stored in sanitizer

(2) Cloths used for wiping food spills shall be dry and used for wiping food spills from tableware and single-service articles or wet and cleaned, stored in a chemical sanitizer, and used for wiping spills from food-contact and nonfood-contact surfaces of equipment.

separate for raw

(3) Dry or wet cloths that are used with raw animal foods shall be kept separate from cloths used for other purposes, and wet cloths used with raw animal foods shall be kept in a separate sanitizing solution.

clean solution

(4) Wet wiping cloths used with a freshly made sanitizing solution and dry wiping cloths shall be free of food debris and visible soil.

7.3.3.4.5 Gloves shall be used as follows: 19

one task/ discard

(1) If used, single-use gloves shall be used for only one task such as working with ready-to-eat food or with raw animal food, used for no other purpose, and discarded when damaged or soiled or when interruptions occur in the operation.

slash-resistant

(2) Slash-resistant gloves that are used to protect the hands during operations requiring cutting shall be used in direct contact only with food that is subsequently cooked such as frozen food or a primal cut of meat.

covered when RTE food prep

(3) *Slash-resistant gloves may be used with ready-to-eat food that will not be subsequently cooked if the slash-resistant gloves have a smooth, durable, and nonabsorbent outer surface; or if the slash resistant gloves are covered with a smooth, durable, nonabsorbent glove or a single-use glove.*

cloth gloves

(4) Cloth gloves may not be used in direct contact with food unless the food is subsequently cooked such as frozen food or a primal cut of meat.

7.3.3.4.6 Procedures for second portions and refills shall be as follows: 19

second portions and refills

(1) Except for refilling a consumer's drinking cup or container without contact between the pouring utensil and the lip-contact area of the drinking cup or container, food employees may not use tableware, including single-service articles, soiled by the consumer, to provide second portions or refills.

soiled tableware

(2) Except as specified below, self-service consumers may not be allowed to use soiled tableware, including single-service articles, to obtain additional food from the display and serving equipment.

self-service

(3) *Drinking cups and containers may be reused by self-service consumers if refilling is a contamination-free process.*

7.3.3.5 Food Storage and Preparation

storage protection

7.3.3.5.1 Food shall be protected from contamination by storing the food: 19

clean dry

(1) In a clean, dry location;

not exposed

(2) Where it is not exposed to splash, dust, or other contamination; and

above deck

(3) At least 15 centimeters (6 inches) above the deck.

prohibited storage

7.3.3.5.2 Food may not be stored: 19

(1) In locker rooms;

(2) In toilet rooms;

(3) In dressing rooms;

(4) In garbage rooms;

(5) In mechanical rooms;

(6) Under sewer lines that are not continuously sleeve welded;

(7) Under leaking water lines, including leaking automatic fire sprinkler heads, or under lines on which water has condensed;

(8) Under open stairwells; or

(9) Under other sources of contamination from nonfood items such as ice blocks, ice carvings and flowers.

PHF packages in vending machines

7.3.3.5.3 Potentially hazardous food dispensed through a vending machine shall be in the package in which it was placed at the galley or food-processing plant at which it was prepared. 19

preparation

7.3.3.5.4 During preparation, unpackaged food shall be protected from environmental sources of contamination such as rain. 19

7.3.3.6 Food Display and Service

display preparation

7.3.3.6.1 Food on display shall be protected from contamination by the use of packaging; counter, service line, or salad bar food guards; display cases; or other effective means. 19

Condiments 7.3.3.6.2 Condiments shall be protected from contamination: 19

(1) By being kept in dispensers that are designed to provide protection, protected food displays provided with the proper utensils, original containers designed for dispensing, or individual packages or portions; and

(2) Condiments at a vending machine location shall be in individual packages or provided in dispensers that are filled at an approved location, such as the galley that provides food to the vending machine location, a food-processing plant, or a properly equipped facility that is located on the site of the vending machine location.

self-service 7.3.3.6.3 Consumer self-service operations, such as salad bars and buffets, for unpackaged ready-to-eat foods: 19

(1) Shall be provided with suitable utensils or effective dispensing methods that protect the food from contamination; and

(2) Shall be monitored by food employees trained in safe operating procedures.

food re-service 7.3.3.6.4 After being served and in the possession of a consumer or being placed on a buffet service line, food that is unused or returned by the consumer: 15 C

(1) May not be offered as food for human consumption.

(2) *Except a container of food that is not potentially hazardous may be transferred from one consumer to another if the food is dispensed so that it is protected from contamination and the container is closed between uses, such as a narrow-neck bottle containing catsup, steak sauce, or wine; or the food, such as crackers, salt, or pepper, is in an unopened original package and is maintained in sound condition.*

(3) Except re-service for foods served to passengers from a fully enclosed display case, under strict employee monitoring, strict temperature control of hot/cold potentially hazardous foods, proper cooling and reheating of hot held potentially hazardous foods, and complete protection from any other contamination sources, including pests is permitted.

7.3.3.7 Other Contamination

other contaminants 7.3.3.7.1 Food shall be protected from contamination that may result 19

from a factor or source such as seawater, bilge water, or hydraulic or fuel lines.

7.3.4 Pathogen Destruction

7.3.4.1 Cooking Temperatures / Times

cooking

7.3.4.1.1 Raw animal foods such as eggs, fish, meat, poultry, and foods containing these raw animal foods, shall be cooked to heat all parts of the food to a temperature and for a time that complies with one of the following methods based on the food that is being cooked: 16 C

63 °C/ 145 °F

(1) 63°C (145°F) or above for 15 seconds for raw shell eggs that are broken and prepared in response to consumers' orders and for immediate service, and fish, meat, and pork including game animals commercially raised for food and game animals under a voluntary inspection program;

68 °C/ 155°F

(2) 68°C (155°F) for 15 seconds or equivalent temperature-time combination for ratites and injected meats; the following if they are comminuted: fish, meat, game animals commercially raised for food, and game animals under a voluntary inspection program; and raw eggs that are not prepared for immediate service; or

74°C/ 165 °F

(3) 74°C (165°F) or above for 15 seconds for poultry, wild game animals not specified in (2), stuffed fish, stuffed meat, stuffed pasta, stuffed poultry, stuffed ratites, or stuffing containing fish, meat, poultry, or ratites.

roasts

(4) Whole beef roasts, corned beef roasts, pork roasts, and cured pork roasts such as ham, shall be cooked to 63°C (145°F) or above for 15 seconds or to equivalent temperature-time combination in ovens operated in accordance with the specifications in Annex 13.6.

beef steaks

(5) *A raw or undercooked whole-muscle, intact beef steak may be served or offered for sale in a ready-to-eat form if the steak is labeled to indicate that it meets the definition of "whole-muscle, intact beef;" and the steak is cooked on both the top and bottom to a surface temperature of 63°C (145°F) or above and a cooked color change is achieved on all external surfaces.*

raw/lightly cooked

(6) *A raw animal food such as raw fish, raw-marinated fish, raw molluscan shellfish, or steak tartare; or a partially cooked food such as lightly cooked fish, soft cooked eggs, or rare meat other than whole-muscle, intact beef steaks, may be served or*

offered for sale in a ready-to-eat form if the consumer is informed by the written consumer advisory; or the VSP grants a variance from the cooking recommendations based on a HACCP plan that is submitted by the vessel and approved. The HACCP plan must document scientific data or other information showing that a lesser time and temperature regimen results in a safe food. The HACCP plan must verify that equipment and procedures for food preparation and training of food employees meet the conditions of the variance.

microwave 7.3.4.1.2 Raw animal foods cooked in a microwave oven shall be: 16 C

(1) Rotated or stirred throughout or midway during cooking to compensate for uneven distribution of heat;

(2) Covered to retain surface moisture;

(3) Heated to a temperature of at least 74°C (165°F) in all parts of the food; and

(4) Allowed to stand covered for 2 minutes after cooking to obtain temperature equilibrium.

fruits/ vegetables *7.3.4.1.3* *Fruits and vegetables that are cooked for hot holding shall be cooked to a temperature of 60°C (140°F).* *17*

7.3.4.2 Parasite Destruction

parasite destruction *7.3.4.2.1* *Before service in ready-to-eat form, raw, raw-marinated, partially cooked, or marinated-partially cooked fish other than molluscan shellfish:* 16 C

(1) Shall be frozen throughout to a temperature of -20°C (-4°F) or below for 168 hours (7 days) in a freezer; or -35°C (-31°F) or below for 15 hours in a blast freezer.

(2) If the fish are tuna of the species Thunnus alalunga, T. albacares (yellowfin tuna), T. atlanticus, T. maccoyii (bluefin tuna, southern), T. obesus (bigeye tuna), or T. thynnus (bluefin tuna, northern), the fish may be served in a raw, raw-marinated, or partially cooked ready-to-eat form without freezing.

(3) *If foods, such as gravlax, seviche, fish carpaccio, or sashimi, are prepared in a food processing plant and certified as parasite free, they may be served raw, raw-marinated, or partially cooked ready-to-eat without freezing the product on-board the vessel.*

records	7.3.4.2.2	If raw, raw-marinated, partially cooked, or marinated-partially cooked fish are served in ready-to-eat form: (1) The person in charge shall record the freezing temperature and time to which the fish are subjected and shall retain the records on the vessel for 90 calendar days beyond the time of service or sale of the fish; or (2) If the fish are frozen by a supplier, a written letter from the supplier which specifies the fish species involved and both the temperature to which the fish was frozen and the total time period at that temperature. If the supplier provides any of the same fish species to the vessel in a fresh state, there shall be some designation on the outer packaging for the parasite-free fish.	17	
	7.3.4.3	**Reheating**		
immediate service	7.3.4.3.1	*Cooked and refrigerated food that is prepared for immediate service in response to an individual consumer order, such as a roast beef sandwich au jus, may be served at any temperature.*		
74 °C/ 165 °F	7.3.4.3.2	Potentially hazardous food that is cooked, cooled, and reheated for hot holding shall be reheated so that all parts of the food reach a temperature of at least 74°C (165°F) for 15 seconds.	16	C
microwave heating	7.3.4.3.3	If reheated in a microwave oven for hot holding, potentially hazardous food shall be reheated so that all parts of the food reach a temperature of at least 74°C (165°F) and the food is rotated or stirred, covered, and allowed to stand covered for 2 minutes after reheating.	16	C
commercial products	7.3.4.3.4	Ready-to-eat potentially hazardous food taken from a commercially processed, hermetically sealed container, or from an intact package from a food processing plant that is inspected by the food regulatory authority that has jurisdiction over the plant, shall be heated to a temperature of at least 60°C (140°F) for hot holding.	17	
rapid reheat	7.3.4.3.5	Reheating for hot holding shall be done rapidly and the time the food is between 5°C (41°F) and 74°C (165°F) may not exceed 2 hours.	16	C
reheat once	7.3.4.3.6	Potentially hazardous food may not be reheated more than once.	17	
reheat roast beef	7.3.4.3.7	*Remaining unsliced portions of roasts of beef that are cooked*		

on the vessel may be reheated for hot holding using the oven parameters and minimum time and temperature conditions used in the original cooking process.

7.3.5 Food Holding Temperatures and Times

7.3.5.1 Frozen, Slacking and Thawing Procedures

7.3.5.1.1 Stored frozen foods shall be maintained frozen. 17

slacking

7.3.5.1.2 Frozen potentially hazardous food that is slacked to moderate the temperature shall be held: 17

(1) Under refrigeration that maintains the food temperature at 5°C (41°F) or less; or

(2) At any temperature if the food remains frozen.

thawing under refrigeration

7.3.5.1.3 Potentially hazardous food shall be thawed: 17

(1) Under refrigeration that maintains the food temperature at 5°C (41°F) or less; or

running water

(2) Completely submerged under running water at a water temperature of 21°C (70°F) or below, with sufficient water velocity to agitate and float off loose particles in an overflow, and for a period of time that does not allow thawed portions of ready-to-eat food to rise above 5°C (41°F), or for a period of time that does not allow thawed portions of a raw animal food requiring cooking to be above 5°C (41°F) for more than 4 hours including the time the food is exposed to the running water, the time needed for preparation for cooking, or the time it takes under refrigeration to lower the food temperature to 5°C (41°F); or

cooking/ microwave

(3) As part of a cooking process if the food that is frozen is cooked, or thawed in a microwave oven.

(4) *Using any procedure if a portion of frozen ready-to-eat food is thawed and prepared for immediate service in response to an individual consumer's order.*

7.3.5.2 Food Cooling

cooling times/ temperatures 7.3.5.2.1 Cooked potentially hazardous food shall be cooled: 16 C

(1) Within 2 hours, from 60°C (140°F) to 21°C (70°F); and

(2) Within 4 hours, from 21°C (70°F) to 5°C (41°F) or less.

cooling prepared food 7.3.5.2.2 Potentially hazardous food shall be cooled within 4 hours to 5°C (41°F) or less, if prepared from ingredients at ambient temperature, such as reconstituted foods and canned tuna. 16 C

cooling received food 7.3.5.2.3 A potentially hazardous food received in compliance with laws allowing a temperature above 5°C (41°F) during shipment from the supplier shall be cooled within 4 hours to 5°C (41°F) or less. 16 C

7.3.5.2.4 *Shell eggs need not comply with the cooling time if the eggs are placed immediately upon their receipt in refrigerated equipment that is capable of maintaining food at 5°C (41°F) or less.*

cooling methods 7.3.5.2.5 Cooling shall be accomplished using one or more of the following methods based on the type of food being cooled: 17

(1) Placing the food in shallow pans; separating the food into smaller or thinner portions; using blast chillers, freezers, or other rapid cooling equipment; stirring the food in a container placed in an ice water bath; using containers that facilitate heat transfer; adding ice as an ingredient; or other effective methods.

arrangement

(2) When placed in cooling or cold-holding equipment, food containers in which food is being cooled shall be arranged in the equipment to provide maximum heat transfer through the container walls; and loosely covered, or uncovered if protected from overhead contamination, during the cooling period to facilitate heat transfer from the surface of the food.

cooling logs 7.3.5.2.6 Logs documenting cooked potentially hazardous food cooling temperatures and times from the starting points designated in 7.3.5.2.1 thru the control points at 2 and 6 hours shall be maintained onboard the vessel for a period of 30 days from the date the food was placed in a cooling process. Logs documenting cooling of potentially hazardous foods prepared from ingredients at ambient temperatures, with the start time to the time when 5 °C (41 °F) is reached, shall also be maintained for a 30 day period, beginning with the day of 17

preparation.

7.3.5.3 Food Holding Temperatures and Times

holding temperature/ time — 7.3.5.3.1 — *Except during preparation, cooking, or cooling, or when time is used as the public health control*, potentially hazardous food shall be maintained: — 16 C

60 °C/140 °F — (1) At 60°C (140°F) or above, *except that roasts may be held at a temperature of 54°C (130°F)*; or

5 °C/41 °F — (2) At 5°C (41°F) or less.

RTE PHF shelf-life — 7.3.5.3.2 — Refrigerated, ready-to-eat, potentially hazardous food: — 16 C

prepared on vessel — (1) Prepared on a vessel and held refrigerated for more than 24 hours shall be clearly marked at the time of preparation to indicate the date or day by which the food shall be consumed, which is 7 calendar days or fewer from the day the food is prepared. The day of preparation is counted as day 1.

from food processing plant — (2) A container of refrigerated, ready-to-eat potentially hazardous food prepared and packaged by a food processing plant and held on the vessel after opening for more than 24 hours shall be clearly marked, at the time the original container is opened, to indicate the date by which the food shall be consumed which is, including the day the original container is opened, 7 calendar days or fewer after the original container is opened. The day of opening is counted as day 1.

system used and exempted products — (3) *The date marking requirement can be accomplished with a calendar date, day, color-code, or other system, provided it is effective. Hard and semisoft aged cheeses, and pasteurized process cheese manufactured according to 21 CFR 133 are exempt from the date marking requirement. Some shelf stable meats (dry, fermented sausages and salt-cured products such as prosciutto and parma ham that are not labeled "Keep Refrigerated") are exempt from the date marking requirement.*

discarding RTE PHF — 7.3.5.3.3 — Refrigerated, ready-to-eat, potentially hazardous food shall be discarded if not consumed within 7 calendar days from the date of preparation or opening. — 16 C

retain date	7.3.5.3.4	A refrigerated, potentially hazardous, ready-to-eat food ingredient or a portion of a refrigerated, potentially hazardous, ready-to-eat food that is subsequently combined with additional ingredients or portions of food shall retain the date marking of the earliest or first-prepared ingredient.	16	C
time as a public health control	7.3.5.3.5	If time only, rather than time in conjunction with temperature, is used as the public health control for a working supply of potentially hazardous food before cooking, or for ready-to-eat potentially hazardous food that is displayed or held for service for immediate consumption: (1) The food shall be marked or otherwise identified to indicate the time that is 4 hours past the point in time when the food is removed from temperature control; (2) The food shall be cooked and served, served if ready-to-eat, or discarded, within 4 hours from the time when the food is removed from temperature control; and (3) The food in unmarked containers or packages or marked to exceed a 4 hour limit shall be discarded.	16	C
written procedures	7.3.5.3.6	Written procedures that ensure compliance with these guidelines shall be maintained on the vessel and made available to the VSP, upon request.	16	C
day stores	7.3.5.3.7	Refrigerated, ready-to-eat, potentially hazardous food may be held at 7°C (45°F) up to 24 hours in existing short term holding refrigeration equipment provided:	16	C
designation label		(1) The equipment is designated by a permanent label affixed to it indicating the maximum allowable product temperature is 7°C (45°F) and the maximum allowable storage time is 24 hours;		
container labeling		(2) All containers of potentially hazardous foods placed in the unit must be labeled with a date and time by which food shall be used or discarded;		
pre-cooled PHF		(3) Potentially hazardous foods when placed in the equipment shall be at 5°C (41°F) or less; and		
replacement		(4) When the equipment is upgraded or replaced, it shall be with equipment that can maintain the potentially hazardous food at 5°C (41°F) or less.		

7.3.6 Consumer Information

7.3.6.1 Advisory

consumer advisory	7.3.6.1.1	If an animal food such as beef, eggs, fish, lamb, milk, pork, poultry, or shellfish that is raw, undercooked, or not otherwise processed to eliminate pathogens is offered in a ready-to-eat form or as a raw ingredient in another ready-to-eat food, the passengers shall be informed by vessel newsletter articles, brochures, embarkation television broadcasts, menu advisories, placards, or other written means of the significantly increased risk to certain especially vulnerable consumers eating such foods in raw or undercooked form. *Raw shell egg preparations are prohibited in uncooked products as described in 7.3.3.2.4.*	16	C

7.3.7 Contaminated Food

7.3.7.1 Discarding Food

unsafe/ adulterated	7.3.7.1.1	A food that is unsafe or adulterated shall be discarded.	18	C
unapproved source	7.3.7.1.2	Food that is not from an approved source shall be discarded.	18	C
restricted or excluded employee	7.3.7.1.3	Ready-to-eat food that may have been contaminated by an employee who has been restricted or excluded for food employee health issues shall be discarded.	18	C
contaminated by others	7.3.7.1.4	Food that is contaminated by food employees, consumers, or other persons through contact with their hands; bodily discharges, such as nasal or oral discharges; or other means shall be discarded.	18	C

7.4 Equipment and Utensils

7.4.1 Materials

7.4.1.1 Multiuse Characteristics and Use Limitations

safe food-contact materials	7.4.1.1.1	Materials that are used in the construction of multiuse utensils and food-contact surfaces of equipment may not allow the migration of deleterious substances or impart colors, odors, or tastes to food and under normal use conditions shall be safe.	26	C
food-contact surfaces	7.4.1.1.2	Materials that are used in the construction of multiuse utensils and food-contact surfaces of equipment shall be: (1) Durable, corrosion-resistant, and nonabsorbent; (2) Sufficient in weight and thickness to withstand repeated	20	

		warewashing; (3) Finished to have a smooth, easily cleanable surface; and (4) Resistant to pitting, chipping, crazing, scratching, scoring, distortion, and decomposition.		
cast iron	7.4.1.1.3	Cast iron may not be used for utensils or food-contact surfaces of equipment. *Cast iron may be used as a surface for cooking. Cast iron may be used in utensils for serving food if the utensils are used only as part of an uninterrupted process from cooking through service.*	20	
lead	7.4.1.1.4	Limitation of lead use shall be as follows: (1) Ceramic, china, crystal utensils, and decorative utensils such as hand painted ceramic or china that are used in contact with food shall be lead-free or contain levels of lead not exceeding the limits for specific utensil categories as allowed by law. (2) Pewter alloys containing lead in excess of 0.05% may not be used as a food-contact surface. (3) Solder and flux containing lead in excess of 0.2% may not be used as a food-contact surface.	20	
copper/ brass	7.4.1.1.5	Copper and copper alloys such as brass: (1) May not be used in contact with a food that has a pH below 6 such as vinegar, fruit juice, or wine or for a fitting or tubing installed between a backflow prevention device and a carbonator. (2) *Copper and copper alloys may be used in contact with beer brewing ingredients that have a pH below 6 in the prefermentation and fermentation steps of a beer brewing operation such as a brewpub or microbrewery.*	26	C
galvanized	7.4.1.1.6	Galvanized metal may not be used for utensils or food-contact surfaces of equipment that are used in contact with acidic food.	26	C

Wood	7.4.1.1.7	Wood use shall be limited as follows: (1) Wood and wood wicker may not be used as a food-contact surface. (2) *Hard maple or an equivalently hard, close-grained wood may be used for cutting boards; cutting blocks; bakers' tables; and utensils such as rolling pins, doughnut dowels, salad bowls, and chopsticks; and wooden paddles used in confectionery operations for pressure scraping kettles when manually preparing confections at a temperature of 110°C (230°F) or above.* (3) *Whole, uncut, raw fruits and vegetables, and nuts in the shell may be kept in the wood shipping containers in which they were received, until the fruits, vegetables, or nuts are used.* (4) *If the nature of the food requires removal of rinds, peels, husks, or shells before consumption, the whole, uncut, raw food may be kept in untreated wood containers; or treated wood containers if the containers are treated with a preservative that meets the requirements specified in 21 CFR 178.3800 Preservatives for Wood.*	20	
coatings	7.4.1.1.8	Multiuse kitchenware such as frying pans, griddles, sauce pans, cookie sheets, and waffle bakers that have a perfluorocarbon resin coating shall be used with nonscoring or nonscratching utensils and cleaning aids.	20	
nonfood-contact surfaces	7.4.1.1.9	Nonfood-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, nonabsorbent, and smooth material.	21	
	7.4.1.2	**Single-Service and Single-Use Characteristics**		
single- service materials safe	7.4.1.2.1	Materials that are used to make single-service and single-use articles shall not allow the migration of deleterious substances and shall be safe.	**26**	**C**
no colors/ odors/ taste	7.4.1.2.2	Materials that are used to make single-service and single-use articles shall not impart colors, odors, or tastes to food and shall be clean.	20	

7.4.2 Design and Construction

7.4.2.1 Durability and Strength

food-contact durability/ strength 7.4.2.1.1 Food contact surfaces of equipment and utensils shall be designed and constructed to be durable and to retain their characteristic qualities under normal use conditions. 20

nonfood-contact durability/ strength 7.4.2.1.2 Nonfood-contact surfaces of equipment and utensils shall be designed and constructed to be durable and to retain their characteristic qualities under normal use conditions. 21

glass TMD's 7.4.2.1.3 Food temperature measuring devices may not have sensors or stems constructed of glass, *except that thermometers with glass sensors or stems that are encased in a shatterproof coating such as candy thermometers may be used.* 26 C

7.4.2.2 Cleanability

multiuse food-contact surfaces 7.4.2.2.1 Multiuse food-contact surfaces shall be: 20

(1) Smooth;

(2) Free of breaks, open seams >0.8 mm (1/32 inch), cracks, chips, inclusions, pits, and similar imperfections;

(3) Free of sharp internal angles, corners, and crevices;

(4) Finished to have smooth welds and joints; and

(5) Accessible for cleaning and inspection by one of the following methods without being disassembled, by disassembling without the use of tools, or by easy disassembling with the use of handheld tools commonly available to maintenance and cleaning personnel such as screwdrivers, pliers, open-end wrenches, and Allen wrenches. *This section does not apply to cooking oil storage tanks, distribution lines for cooking oils, or beverage syrup lines or tubes.*

CIP equipment design/ construction 7.4.2.2.2 CIP equipment shall meet the following criteria: 20

(1) It shall be designed and constructed so that cleaning and sanitizing solutions circulate throughout a fixed system and contact all interior food-contact surfaces, and the system is self-draining or capable of being completely drained of cleaning and sanitizing solutions; or

(2) CIP equipment that is not designed to be disassembled for cleaning shall be designed with inspection access points to

ensure that all interior food-contact surfaces throughout the fixed system are being effectively cleaned.

"V" type threads	7.4.2.2.3	*Except for hot oil cooking or filtering equipment*, "V" type threads may not be used on food-contact surfaces.	20
oil filtering equipment	7.4.2.2.4	Hot oil filtering equipment shall be readily accessible for filter replacement and cleaning of the filter.	20
can openers	7.4.2.2.5	Cutting or piercing parts of can openers shall be readily removable for cleaning and for replacement.	20
nonfood-contact design	7.4.2.2.6	Nonfood-contact surfaces shall be free of unnecessary ledges, projections, and crevices, and designed and constructed to allow easy cleaning and to facilitate maintenance.	21
kick plates	7.4.2.2.7	Kick plates shall be designed so that the areas behind them are accessible for inspection and cleaning by: (1) Being easily removable or capable of being rotated open; and (2) Being removable or capable of being rotated open without unlocking equipment doors.	21
grease filters	7.4.2.2.8	Filters or other grease extracting equipment shall be designed to be readily removable for cleaning and replacement if not designed to be cleaned in place.	21
	7.4.2.3	**Accuracy**	
food TMD accuracy	7.4.2.3.1	Food temperature measuring devices: (1) That are scaled only in Celsius or dually scaled in Celsius and Fahrenheit shall be accurate to ±1°C in the intended range of use; and (2) That are scaled only in Fahrenheit shall be accurate to ±2°F in the intended range of use.	20
ambient air TMD accuracy	7.4.2.3.2	Ambient air temperature measuring devices: (1) That are scaled in Celsius or dually scaled in Celsius and Fahrenheit shall be designed to be easily readable and accurate to ±1.5°C in the intended range of use. (2) That are scaled only in Fahrenheit shall be accurate to ±3°F in the intended range of use.	21

7.4.2.4 Functionality

ventilation hood design 7.4.2.4.1 Exhaust ventilation hood systems in food preparation and warewashing areas including components such as hoods, fans, guards, and ducting shall be designed to prevent grease or condensation from draining or dripping onto food, equipment, utensils, linens, and single-service and single-use articles. 37

equipment openings, closures, and deflectors 7.4.2.4.2 Equipment openings, closures and deflectors shall conform to: 20

(1) A cover or lid for equipment shall overlap the opening and be sloped to drain.

(2) An opening located within the top of a unit of equipment that is designed for use with a cover or lid shall be flanged upward at least 5 millimeters (2/10 of an inch).

(3) Fixed piping, temperature measuring devices, rotary shafts, and other parts extending into equipment shall be provided with a watertight joint at the point where the item enters the equipment.

(4) If a watertight joint is not provided, the 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 the food; and the opening shall be flanged at least 5 millimeters (2/10 of an inch).

beverage/ice dispensing 7.4.2.4.3 In equipment that dispenses liquid food or ice in unpackaged form: 20

(1) The delivery tube, chute, orifice, and splash surfaces directly above the container receiving the food shall be designed in a manner, such as with barriers, baffles, or drip aprons, so that drips from condensation and splash are diverted from the opening of the container receiving the food;

(2) The delivery tube, chute, and orifice shall be protected from manual contact such as by being recessed;

(3) The delivery tube or chute and orifice of equipment used to vend liquid food or ice in unpackaged form to self-service consumers shall be designed so that the delivery tube or chute and orifice are protected from dust, insects, rodents, and other contamination by a self-closing door if the equipment is located in an outside area that does not

otherwise afford the protection of an enclosure against the rain, windblown debris, insects, rodents, and other contaminants that are present in the environment, or available for self-service during hours when it is not under the full-time supervision of a food employee; and

(4) The dispensing equipment actuating lever or mechanism and filling device of consumer self-service beverage dispensing equipment shall be designed to prevent contact with the lip-contact surface of glasses or cups that are refilled.

bearings/ gears	7.4.2.4.4	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.	21
beverage line cooling	7.4.2.4.5	Beverage tubing and cold-plate beverage cooling devices may not be installed in contact with stored ice. *This guideline does not apply to cold plates that are constructed integrally without seams in an ice storage bin.*	20
equipment drainage	7.4.2.4.6	Equipment compartments that are subject to accumulation of moisture because of condensation, food or beverage drip, or water from melting ice shall be sloped to an outlet that allows complete draining.	21
drain lines	7.4.2.4.7	Liquid waste drain lines may not pass through an ice machine or ice storage bin.	20
condenser unit	7.4.2.4.8	If a condenser unit is an integral component of equipment, the condenser unit shall be separated from the food and food storage space by a dustproof barrier.	21
ambient air TMD's	7.4.2.4.9	Temperature measuring devices shall conform to the following guidelines:	21

(1) In a mechanically refrigerated or hot-food storage unit, the sensor of a temperature measuring device shall be located to measure the air temperature in the warmest part of a mechanically refrigerated unit and in the coolest part of a hot-food storage unit.

(2) Cold or hot holding equipment used for potentially hazardous food shall be designed to include and shall be equipped with at least one integral or affixed temperature measuring device that is located to allow easy viewing of the device's temperature display.

(3) *The above 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, such as calrod units, heat lamps, cold plates, bains-marie, steam tables, insulated food transport containers, and salad bars.

(4) Temperature measuring devices shall be designed to be easily readable.

(5) Food temperature measuring devices shall have a numerical scale, printed record, or digital readout in increments no greater than 1°C (2°F) in the intended range of use. 20

7.4.2.5 Food Equipment, Standards and Classification

food-contact equipment standards 7.4.2.5.1 Food-contact surfaces of food equipment shall comply with American National Standards Institute (ANSI) or other internationally accredited food equipment sanitation standards for materials, design, and construction. 20

nonfood-contact equipment standards 7.4.2.5.2 Nonfood-contact surfaces of food equipment shall comply with American National Standards Institute (ANSI) or other internationally accredited food-equipment sanitation standards for materials, design, and construction. 21

7.4.3 Numbers and Capacities

7.4.3.1 Cooling, Heating, and Holding Capacities

cold/hot holding capacity 7.4.3.1.1 Equipment for cooling and heating food, and holding cold and hot food, shall be sufficient in number and capacity to maintain specified potentially hazardous food temperatures. 20

7.4.3.2 Ventilation Hood Systems

ventilation hood 7.4.3.2.1 Ventilation hood systems and devices shall be sufficient in number and capacity to prevent grease or condensation from collecting on bulkheads and deckheads. 37

7.4.3.3 Utensils, Consumer Self-Service

dispensing utensil 7.4.3.3.1 A food-dispensing utensil shall be available for each container displayed at a consumer self-service unit such as a buffet or salad bar. 19

utensil protected 7.4.3.3.2 Each self-service food dispensing utensil shall be covered or located beneath shielding during service. 19

7.4.3.4 Food Temperature Measuring Devices

food TMD 7.4.3.4.1 Food temperature measuring devices shall be provided and readily accessible for use in ensuring attainment and maintenance of food temperatures. 20

7.4.4 Equipment Location and Installation

7.4.4.1 Fixed Equipment, Spacing or Sealing

fixed equipment installation 7.4.4.1.1 Equipment that is fixed because it is not easily movable shall be installed so that it is: 21

(1) Spaced to allow access for cleaning along the sides, behind, under and above the equipment;

(2) Spaced from adjoining equipment, bulkhead, and deckhead at a distance of not more than 0.8 millimeter or 1/32 inch; or

(3) Sealed to adjoining equipment or bulkhead, if the equipment is exposed to spillage or seepage.

table- mounted sealed or elevated 7.4.4.1.2 Table-mounted equipment that is not easily movable shall be installed to allow cleaning of the equipment and areas underneath and around the equipment by being: 21

(1) Sealed to the table; or

(2) Elevated on legs.

7.4.4 2 Fixed Equipment, Elevation or Sealing

deck- mounted sealed or elevated 7.4.4.2.1 Deck-mounted equipment that is not easily movable shall be sealed to the deck or elevated on legs that provide at least a 150 millimeter (6-inch) clearance between the deck and the equipment. 21

deck- mounted clearance 7.4.4.2.2 *If no part of the deck under the deck-mounted equipment is more than 150 millimeters (6 inches) from the point of cleaning access, the clearance space may be only 100 millimeters (4 inches).*

table-mounted elevated 7.4.4.2.3 Table-mounted equipment that is not easily movable shall be elevated on legs that provide at least a 100 millimeter (4-inch) clearance between the table and the equipment. 21

table-mounted clearance 7.4.4.2.4 *The clearance space between the table and table-mounted equipment may be:*

(1) 75 millimeters (3 inches) if the horizontal distance of the table top under the equipment is no more than 500 millimeters (20 inches) from the point of access for cleaning; or

(2) 50 millimeters (2 inches) if the horizontal distance of the table top under the equipment is no more than 75 millimeters (3 inches) from the point of access for cleaning.

7.4.5 Maintenance and Operation

7.4.5.1 Equipment

food-contact equipment in good repair 7.4.5.1.1 Food-contact equipment shall be maintained in good repair and proper adjustment including: 20

(1) Equipment shall be maintained in a state of repair and condition that meets the materials, design, construction, and operation specifications of these guidelines.

(2) 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.

nonfood-contact equipment in good repair 7.4.5.1.2 Nonfood-contact equipment shall be maintained in good repair and proper adjustment including: 21

(1) Equipment shall be maintained in a state of repair and condition that meets the materials, design, construction, and operation specifications of these guidelines.

(2) Equipment components such as doors, seals, hinges, fasteners, and kick plates shall be kept intact, tight, and adjusted in accordance with manufacturer's specifications.

cutting boards 7.4.5.1.3 Surfaces such as cutting blocks and boards that are subject to scratching and scoring shall be resurfaced if they no longer can be effectively cleaned and sanitized, or discarded if they are not capable of being resurfaced. 20

microwave ovens 7.4.5.1.4 Microwave ovens shall meet the safety standards specified in 21 CFR 1030.10 Microwave Ovens, or equivalent. 20

7.4.5.2 Good Repair and Calibration

utensils and TMD's in good repair and calibration

7.4.5.2.1 Utensils and temperature measuring devices shall be maintained in good repair and proper adjustment including: 20

(1) Utensils shall be maintained in a state of repair or condition that meets the materials, design and construction specifications of these guidelines or shall be discarded.

(2) Food temperature measuring devices shall be calibrated in accordance with manufacturer's specifications as necessary to ensure their accuracy.

ambient air TMD's good repair and calibration

7.4.5.2.2 Ambient air temperature measuring devices shall be maintained in good repair and be accurate within the intended range of use. 21

7.4.5.3 Single-Service and Single-Use Articles

7.4.5.3.1 Single-service and single-use articles may not be reused. 28

bulk milk tubes

7.4.5.3.2 The bulk milk container dispensing tube shall be cut on the diagonal leaving no more than 25 millimeters (1 inch) protruding from the chilled dispensing head. 20

shell reuse

7.4.5.3.3 Mollusk and crustacean shells may not be used more than once as serving containers. 28

7.5 Warewashing

7.5.1 [Reserved]

7.5.2 Warewashing Design and Construction

7.5.2.1 Warewashing Measuring Device Accuracy

water TMD accuracy

7.5.2.1.1 Water temperature measuring devices: 22

(1) That are scaled in Celsius or dually scaled in Celsius and Fahrenheit shall be designed to be accurate to ±1.5°C in the intended range of use.

(2) That are scaled only in Fahrenheit shall designed to be accurate to ±3°F in the intended range of use.

pressure gauge accuracy	7.5.2.1.2	Pressure measuring devices that display the pressures in the water supply line for the fresh hot water sanitizing rinse shall have increments of 7 kilopascals (1 pounds per square inch) or smaller and shall be accurate to ± 14 kilopascals (± 2 pounds per square inch) in the 100-170 kilopascals (15-25 pounds per square inch) range.	22
	7.5.2.2	**Warewashing Functionality**	
water TMD readable	7.5.2.2.1	Water temperature measuring devices shall be designed to be easily readable.	22
water TMD scale	7.5.2.2.2	Water temperature measuring devices on warewashing machines shall have a numerical scale, printed record, or digital readout in increments no greater than 1°C (2°F) in the intended range of use.	22
warewasher data plate	7.5.2.2.3	A warewashing machine shall be provided with an easily accessible and readable data plate affixed to the machine by the manufacturer that indicates the machine's design and operating specifications including the: (1) Temperatures required for washing, rinsing, and sanitizing; (2) Pressure required for the fresh water sanitizing rinse *unless the machine is designed to use only a pumped sanitizing rinse;* and (3) Conveyor speed for conveyor machines or cycle time for stationary rack machines.	22
baffles/ curtains	7.5.2.2.4	Warewashing machine wash and rinse tanks shall be equipped with baffles, curtains, or other means to minimize internal cross-contamination of the solutions in wash and rinse tanks.	22
warewash TMD's	7.5.2.2.5	A warewashing machine shall be equipped with a temperature measuring device that indicates the temperature of the water: (1) In each wash and rinse tank; and (2) As the water enters the hot water sanitizing final rinse manifold or in the chemical sanitizing solution tank.	22
sanitizer level alert	7.5.2.2.6	A warewashing machine that uses a chemical for sanitization and that is installed after adoption of these guidelines shall be equipped with a device that indicates audibly or visually when more chemical sanitizer needs to be added.	22

pressure gauge	7.5.2.2.7	Warewashing machines that provide a fresh hot water sanitizing rinse: (1) Shall be equipped with a pressure gauge or similar device such as a transducer that measures and displays the water pressure in the supply line immediately before entering the warewashing machine; and (2) If the flow pressure measuring device is upstream of the fresh hot water sanitizing rinse control valve, the device shall be mounted in a 6.4 mm (1/4 inch) Iron Pipe Size (IPS) valve. (3) *These guidelin do not apply to a machine that uses only a pumped or recirculated sanitizing rinse.*	22
manual sanitizing booster heater	7.5.2.2.8	If hot water is used for sanitization in manual warewashing operations, the sanitizing compartment of the sink shall be: (1) Designed with an integral heating device that is capable of maintaining water at a temperature not less than 77°C (171°F); and	22
self-draining	7.5.2.2.9	Sinks and drainboards of warewashing sinks and machines shall be self-draining.	22
	7.5.3	**Warewashing Numbers and Capacities**	
	7.5.3.1	**Three-Compartment Sinks**	
3-compartment sink	7.5.3.1.1	A sink with at least 3 compartments shall be provided for manually washing, rinsing, and sanitizing equipment and utensils.	22
size	7.5.3.1.2	Sink compartments shall be large enough to accommodate immersion of the largest equipment and utensils. If equipment or utensils are too large for the warewashing sink, a warewashing machine or alternative equipment, such as a 3-bucket system, shall be used.	22

manual warewashing alternatives 7.5.3.1.3 *Alternative manual warewashing equipment may be used when there are special cleaning needs or constraints and its use is approved. Alternative manual warewashing equipment may include:*

(1) *High-pressure detergent sprayers;*

(2) *Low- or line-pressure spray detergent foamers;X*

(3) *Other task-specific cleaning equipment;*

(4) *Brushes or other implements;*

(5) *Receptacles such as a 3-bucket system that substitute for the compartments of a 3-compartment sink.*

7.5.3.2 Drainboards

soiled/clean storage 7.5.3.2.1 Drainboards, utensil racks, or tables large enough to accommodate all soiled and cleaned items that may accumulate during hours of operation shall be provided for necessary utensil holding before cleaning and after sanitizing. 22

7.5.3.3 Sanitizing Solutions, Testing Devices

test kit 7.5.3.3.1 A test kit or other device that accurately measures the concentration in mg/L (ppm) of sanitizing solutions shall be provided. 22

7.5.4 Warewashing Equipment Maintenance and Operation

7.5.4.1 Good Repair and Proper Adjustment

warewash equipment repair 7.5.4.1.1 Warewashing equipment shall be maintained in good repair and properly adjustment including: 22

(1) Warewashing equipment shall be maintained in a state of repair and condition that meets the standards of the materials, design, and construction of these guidelines.

(2) Water pressure, and water temperature measuring devices shall be maintained in good repair and be accurate within the intended range of use.

warewash equipment cleaning	7.5.4.1.2	A warewashing machine; the compartments of sinks, basins, or other receptacles used for washing and rinsing equipment, utensils, or raw foods, or laundering wiping cloths; and drainboards shall be cleaned: (1) Before use; (2) Throughout the day at a frequency necessary to prevent recontamination of equipment and utensils and to ensure that the equipment performs its intended function; and (3) If used, at least every 24 hours.	22
warewash equipment operation	7.5.4.1.3	A warewashing machine and its auxiliary components: (1) Shall be operated in accordance with the machine's data plate and other manufacturer's instructions. (2) A warewashing machine's conveyor speed or automatic cycle times shall be maintained accurately timed in accordance with manufacturer's specifications.	22
cleaners	7.5.4.1.4	When used for warewashing, the wash compartment of a sink, mechanical warewasher, or wash receptacle of alternative manual warewashing equipment 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.	22
solution clean	7.5.4.1.5	The wash, rinse, and sanitize solutions shall be maintained clean.	22
	7.5.4.2	**Wash Temperatures**	
manual wash temperature	7.5.4.2.1	The temperature of the wash solution in manual warewashing equipment shall be maintained at not less than the temperature specified on the cleaning agent manufacturer's label instructions.	23

warewash wash temperatures	7.5.4.2.2	The temperature of the wash solution in spray type warewashers that use hot water to sanitize may not be less than: (1) For a stationary-rack, single-temperature machine, 74°C (165°F); (2) For a stationary-rack, dual-temperature machine, 66°C (150°F); (3) For a single-tank, conveyor, dual-temperature machine, 71°C (160°F); or (4) For a multitank, conveyor, multitemperature machine, 66°C (150°F).	23	
wash temperatures for chemical machines	7.5.4.2.3	The temperature of the wash solution in spray-type warewashers that use chemicals to sanitize may not be less than 49°C (120°F).	23	
	7.5.5	**Cleaning Equipment and Utensils**		
	7.5.5.1	**Cleaning Frequency**		
food-contact surfaces clean	7.5.5.1.1	Food-contact surfaces of equipment and utensils shall be clean to sight and touch.	26	C
encrusted	7.5.5.1.2	The food-contact surfaces of cooking equipment and pans shall be kept free of encrusted grease deposits and other soil accumulations.	26	C
nonfood-contact surfaces	7.5.5.1.3	Nonfood-contact surfaces of equipment shall be kept free of an accumulation of dust, dirt, food residue, and other debris.	27	
food-contact cleaning frequency	7.5.5.1.4	Equipment food-contact surfaces and utensils shall be cleaned: (1) Before each use with a different type of raw animal food such as beef, fish, lamb, pork, or poultry; (2) Each time there is a change from working with raw foods to working with ready-to-eat foods; (3) Between uses with raw fruits and vegetables and with potentially hazardous food; (4) Before using or storing a food temperature measuring device; and	26	C

(5) At any time during the operation when contamination might have occurred.

in-use food-contact equipment	7.5.5.1.5	If used with potentially hazardous food, equipment food-contact surfaces and utensils used on a continuing basis shall be cleaned throughout the day at least every 4 hours.	28
dispensing equipment cleaning	7.5.5.1.6	Cleaning of equipment such as ice bins and beverage dispensing nozzles and enclosed components of equipment such as ice makers, cooking oil storage tanks, and distribution lines, beverage, and syrup dispensing lines or tubes, and coffee bean grinders shall be conducted: (1) At a frequency specified by the manufacturer, or (2) Absent manufacturer specifications, at a frequency necessary to preclude accumulation of soil or mold.	28
cooking/ baking equipment cleaning	7.5.5.1.7	Cooking and baking equipment shall be cleaned as follows: (1) The food-contact surfaces of cooking and baking equipment shall be cleaned at least every 24 hours. (2) The cavities and door seals of microwave ovens shall be cleaned at least every 24 hours by using the manufacturer's recommended cleaning procedure.	28
	7.5.5.2	**Dry Cleaning Methods**	
dry cleaning	7.5.5.2.1	Dry cleaning shall be accomplished as follows: (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. (2) Cleaning equipment used in dry cleaning food-contact surfaces may not be used for any other purpose.	28
	7.5.5.3	**Precleaning and Racking**	
precleaning/ scrapping	7.5.5.3.1	Food debris on equipment and utensils shall be scrapped over a waste disposal unit, pulper, or garbage receptacle or shall be removed in a warewashing machine with a prewash cycle.	23
presoak/ scrubbed	7.5.5.3.2	If necessary for effective cleaning, utensils, and equipment shall be preflushed, presoaked, or scrubbed with abrasives.	23

Racking	7.5.5.3.3	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.	22
	7.5.5.4	**Wet Cleaning**	
washing	7.5.5.4.1	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.	23
soil-specific	7.5.5.4.2	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.	22
	7.5.5.5	**Alternative Manual Warewashing Procedures**	
alternative warewashing procedures	7.5.5.5.1	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 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.	23
spo[illegible]mited	7.5.5.5.2	Sponges may not be used in contact with cleaned and sanitized or in-use food-contact surfaces.	22

7.5.5.6 Rinsing Procedures

rinsing 7.5.5.6.1 Washed utensils and equipment shall be rinsed so that abrasives are removed and cleaning chemicals are removed or diluted through the use of water by using one of the following procedures: 23

(1) Use of a distinct, separate water rinse after washing and before sanitizing if using a 3-compartment sink, alternative manual warewashing equipment equivalent to a 3-compartment sink, or a 3-step washing, rinsing, and sanitizing procedure in a warewashing system for CIP equipment;

(2) If using a warewashing machine that does not recycle the sanitizing solution, or alternative manual warewashing equipment such as sprayers, use of a nondistinct water rinse that is integrated in the application of the sanitizing solution, and wasted immediately after each application; or

(3) 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.

7.5.6 Sanitizing

7.5.6.1 Sanitizing Temperatures

manual hot-water sanitizing 7.5.6.1.1 In a manual operation, if immersion in hot water is used for sanitizing: 24 C

(1) The temperature of the water shall be maintained at 77°C (171°F) or above; and

(2) The food-contact surface shall be immersed for at least 30 seconds.

warewasher hot-water sanitizing 7.5.6.1.2 In a mechanical operation, the temperature of the fresh hot water sanitizing rinse as it enters the manifold may not be more than 90°C (194°F), or less than: 24 C

(1) For a stationary rack, single temperature machine, 74°C (165°F); or

(2) For all other machines, 82°C (180°F).

(3) A utensil surface temperature of 71°C (160°F) as measured by an irreversible registering temperature indicator shall be achieved.

(4) The maximum temperature of 90°C (194°F), does not apply to the high pressure and temperature systems with wand-type, hand-held, spraying devices used for the in-place cleaning and sanitizing of equipment such as meat saws.

warewasher hot-water sanitizing pressure 7.5.6.1.3 The flow pressure of the fresh hot water sanitizing rinse in a warewashing machine may not be less than 100 kilopascals (15 pounds per square inch) or more than 170 kilopascals (25 pounds per square inch) as measured in the water line immediately downstream or upstream from the fresh hot water sanitizing rinse control valve. 22

7.5.6.2 Sanitizing Concentrations

chemical sanitizing solutions 7.5.6.2.1 A chemical sanitizer used in a sanitizing solution for a manual or mechanical operation shall be listed in 21 CFR 178.1010 Sanitizing Solutions. 24 C

chemical sanitizing exposure 7.5.6.2.2 A chemical sanitizer shall be used in accordance with the EPA-approved manufacturer's label use instructions at a minimum temperature of 24°C (75°F) with an exposure time of 7 seconds for a chlorine solution and 30 seconds for other chemical sanitizers. 24 C

chemical sanitizing concentration 7.5.6.2.3 The sanitizing solutions shall be used with the following concentrations. 24 C

(1) A chlorine solution shall have a concentration between 50 mg/L (ppm) and 200 mg/L (ppm);

(2) An iodine solution shall have a pH of 5.0 or less or a pH no higher than the level for which the manufacturer specifies the solution is effective, and a concentration between 12.5 mg/L (ppm) and 25 mg/L (ppm); or

(3) A quaternary ammonium compound solution shall have a concentration as specified in 21 CFR 178.1010 Sanitizing Solutions and as indicated by the manufacturer's use directions included in the labeling.

(4) If another solution concentration or temperature of a chlorine, iodine, or quaternary ammonium compound is used, the vessel shall demonstrate to VSP that the solution achieves sanitization and the use of the solution shall be approved; or

(5) If a chemical sanitizer other than a chlorine, iodine, or quaternary ammonium compound is used, it shall be applied in accordance with the manufacturer's use directions included

in the labeling.

sanitizer concentration testing	7.5.6.2.4	Concentration of the sanitizing solution shall be accurately determined by using a test kit or other device.	22
	7.5.7	**Protection of Clean Items**	
	7.5.7.1	**Drying**	
air-dried/ drained	7.5.7.1.1	After cleaning and sanitizing, equipment and utensils shall be air-dried or adequately drained before contact with food. *Cleaned, sanitized, and air-dried dishware, glassware, and utensils may be polished with a clean, dry, lint-free cloth that is maintained clean and dry.*	28
	7.5.7.2	**Lubricating and Reassembling**	
lubricating	7.5.7.2.1	Lubricants shall be applied to food-contact surfaces that require lubrication in a manner that does not contaminate food-contact surfaces.	28
assembling	7.5.7.2.2	Equipment shall be reassembled so that food-contact surfaces are not contaminated.	28
	7.5.7.3	**Storing Equipment, Utensils, Linens, and Single-Service and Single-Use Articles**	
storing protected	7.5.7.3.1	Cleaned equipment and utensils, laundered linens, and single-service and single-use articles shall be stored: (1) In a clean, dry location; (2) Where they are not exposed to splash, dust, or other contamination; and (3) At least 150 millimeters (6 inches) above the deck.	28
storing inverted	7.5.7.3.2	Clean equipment and utensils shall be stored: (1) In a self-draining position that allows air drying; and (2) Covered or inverted.	28
original package	7.5.7.3.3	Single-service and single-use articles shall be kept in the original protective package or stored by using other means that afford protection from contamination until used.	28
utensil dispensing	7.5.7.3.4	Eating utensils dispensed at a consumer self-service unit such as a buffet or salad bar shall be protected from contamination.	28

7.5.8 Laundering

7.5.8.1 Laundry Facilities

laundry equipment	7.5.8.1.1	If linens used in the food areas are laundered on the vessel, a mechanical clothes washer and dryer shall be provided and used.	28
	7.5.8.1.2	*If laundering is limited to wiping cloths intended to be used moist, or to wiping cloths that are air-dried, a mechanical clothes washer and dryer need not be provided.*	
laundry operations location	7.5.8.1.3	Laundry operations shall be located so that the operations are protected from contamination and only where there is no exposed food; clean equipment, utensils, and linens; and unwrapped single-service and single-use articles.	28

7.5.8.2 Laundry Procedures

laundry frequency	7.5.8.2.1	Linens that do not come in direct contact with food shall be laundered between operations if they become wet, sticky, or visibly soiled.	28
cloth gloves	7.5.8.2.2	Cloth gloves shall be laundered before being used with a different type of raw animal food such as beef, lamb, pork, and fish.	28
linens/ napkins	7.5.8.2.3	Linens and napkins that are used to line food service containers and cloth napkins shall be laundered between each use.	28
wiping cloths	7.5.8.2.4	Wet wiping cloths shall be laundered daily.	28
	7.5.8.2.5	Dry wiping cloths shall be laundered as necessary to prevent contamination of food and clean serving utensils.	28
laundry procedures	7.5.8.2.6	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.	28
washing	7.5.8.2.7	Linens shall be mechanically washed.	28

7.6 Poisonous and Toxic Materials

7.6.1 Identification

7.6.1.1 Labeling

manufacturer label 7.6.1.1.1 Original containers of poisonous or toxic materials and personal-care items shall bear a legible manufacturer's label. 31 C

working containers 7.6.1.1.2 Working containers used for storing poisonous or toxic materials such as cleaners and sanitizers taken from bulk supplies shall be clearly and individually identified with the common name of the material. 31 C

7.6.2 Operational Supplies and Applications

7.6.2.1 Storage

pesticide/ rodenticide locker 7.6.2.1.1 Pesticides, insecticides, and rodenticides shall be stored in a locked area of the vessel that is not in a food area 31 C

cleaning materials locker 7.6.2.1.2 Poisonous or toxic materials used in food area cleaning and maintenance shall be stored so they cannot contaminate food, equipment, utensils, linens, and single-service and single-use articles by separating the poisonous or toxic materials by storing in a cleaning materials locker. 31 C

7.6.2.1.3 *This guideline does not apply to equipment and utensil cleaners and sanitizers that are stored in warewashing areas for availability and convenience if the materials are stored to prevent contamination of food, equipment, utensils, linens, and single-service and single-use articles.*

7.6.2.2 Use

necessary materials 7.6.2.2.1 Only poisonous or toxic materials that are required for the operation and maintenance of a food areas of the vessel, such as for the cleaning and sanitizing of equipment and utensils and the control of insects and rodents, shall be allowed in the food areas of the vessel. 31 C

use conditions 7.6.2.2.2 Poisonous or toxic materials shall be used according to: 31 C

(1) Law and these guidelines;

(2) Manufacturer's use directions included in labeling, and, for a pesticide, manufacturer's label instructions that state that use is allowed in a food area; and

(3) The conditions of certification, if certification is required,

		for use of the pest-control materials.		
application	7.6.2.2.3	Poisonous or toxic materials shall be applied so that: (1) A hazard to employees or other persons is not constituted, and (2) Contamination including toxic residues resulting from drip, drain, fog, splash or spray on food, equipment, utensils, linens, and single-service and single-use articles is prevented.	31	C
restricted-use applications	7.6.2.2.4	For a restricted-use pesticide, food, equipment, utensils, linens, and single-service and single-use articles shall be removed; covered with impermeable covers; and other precautions.	31	C
restricted-use applicator	7.6.2.2.5	A restricted-use pesticide shall be applied only by an applicator certified as defined in 7 USC 136(e) Certified Applicator, of the Federal Insecticide, Fungicide and Rodenticide Act or a person under the direct supervision of a certified applicator.	31	C
equipment cleaning and sanitizing	7.6.2.2.6	Food equipment and utensils in the area treated shall be cleaned and sanitized following the application.	31	C
containers	7.6.2.2.7	A container previously used to store poisonous or toxic materials may not be used to store, transport, or dispense food.	31	C
	7.6.2.3	**Sanitizers and Other Food Area Chemicals**		
sanitizers	7.6.2.3.1	Chemical sanitizers and other chemical antimicrobials applied to food-contact surfaces shall meet the requirements specified in 21 CFR 178.1010 Sanitizing Solutions.	31	C
fruit/ vegetable wash	7.6.2.3.2	Chemicals used to wash or peel raw, whole fruits and vegetables shall meet the requirements specified in 21 CFR 173.315 Chemicals Used in Washing or to Assist in the Lye Peeling of Fruits and Vegetables.	31	C
boiler water additives	7.6.2.3.3	Chemicals used as boiler water additives for culinary steam or other food area purposes shall meet the requirements specified in 21 CFR 173.310 - Boiler Water Additives.	31	C

drying agents	7.6.2.3.4	Drying agents used in conjunction with sanitization shall contain only components that are listed as one of the following: (1) Generally recognized as safe for use in food as specified in 21 CFR 182 - Substances Generally Recognized as Safe or 21 CFR 184 - Direct Food Substances Affirmed as Generally Recognized as Safe; (2) Generally recognized as safe for the intended use as specified in 21 CFR 186 - Indirect Food Substances Affirmed as Generally Recognized as Safe; (3) Approved for use as a drying agent under a prior sanction specified in 21 CFR 181 - Prior-Sanctioned Food Ingredients; (4) Specifically regulated as an indirect food additive for use as a drying agent as specified in 21 CFR Parts 175-178; or (5) Approved for use as a drying agent under the threshold of regulation process established by 21 CFR 170.39 Threshold of Regulation for Substances Used in Food-Contact Articles.	31	C
approved for use with chemical sanitizers	7.6.2.3.5	Drying agents, when used with chemical sanitization, shall be specifically approved for use with chemical sanitizing solutions.	31	C
lubricants	7.6.2.3.6	Lubricants shall meet the requirements specified in 21 CFR 178.3570 Lubricants with Incidental Food-Contact, if they are used on food-contact surfaces, on bearings and gears located on or within food-contact surfaces, or on bearings and gears that are located so that lubricants may leak, drip, or be forced into food or onto food-contact surfaces.	31	C
	7.6.2.4	**Pesticides and Rodenticides**		
restricted-use pesticides	7.6.2.4.1	Restricted-use pesticides used in food areas shall meet the requirements specified in 40 CFR 152 Subpart I Classification of Pesticides.	31	C
rodent bait	7.6.2.4.2	Rodent bait used in food areas shall be contained in a covered, tamper-resistant bait station.		C
tracking powders	7.6.2.4.3	A tracking powder pesticide may not be used in a food area.	31	C
	7.6.2.4.4	A nontoxic tracking powder such as talcum or flour, if used, may not contaminate food.	19	

	7.6.2.4.5	A nontoxic tracking powder such as talcum or flour, if used, may not contaminate equipment, utensils, linens, and single-service and single-use articles.	28	

7.6.3 Medicines

7.6.3.1 Restriction and Storage

necessary medicines	7.6.3.1.1	Only medicines necessary for the health of the food employees shall be allowed in a food area.	31	C
medicines labeling/ separation	7.6.3.1.2	Medicines that are in a food area for the food employees' use shall be labeled and be located in an area such as the chef's office to prevent the contamination of food, equipment, utensils, linens, and single-service and single-use articles.	31	C
first aid supplies	7.6.3.1.3	First aid supplies that are in a food area for the food employees' use shall be labeled and stored in a kit or a container that is located to prevent the contamination of food, equipment, utensils, linens, and single-service and single-use articles	31	C

7.7 Facilities

7.7.1 Handwashing and Toilet Facilities

7.7.1.1 Handwashing Facility Installation

convenient	7.7.1.1.1	Each food preparation area, bar, warewashing area, and garbage-processing area shall have at least one handwashing facility located in it.	29	C
8 m/25 feet	7.7.1.1.2	The handwashing facility shall be located within 8 m (25 feet) of all parts of the area and should not be located in an adjacent area that requires passage through a closed door, where the user makes hand-contact with the door.	29	C
tempered water	7.7.1.1.3	A handwashing sink shall be equipped to provide water at a temperature of at least 43°C (110°F) through a mixing valve or combination faucet. For handwash sinks with electronic sensors, where the user cannot make temperature adjustments, the temperature provided to the user after the mixing valve shall not exceed 52 °C (125°F).	29	C
metered faucet	7.7.1.1.4	A self-closing, slow-closing, or metering faucet shall provide a flow of water for at least 15 seconds without the need to reactivate the faucet.	30	

automatic systems	7.7.1.1.5	An automatic handwashing facility shall be installed in accordance with manufacturer's instructions.	30	
dispenser/ receptacle	7.7.1.1.6	A handwashing facility shall include a sink, soap dispenser, single-use towels dispenser, and waste receptacle.	30	
sign	7.7.1.1.7	A sign stating "WASH HANDS OFTEN" in a language that the food employees understand shall be posted over handwashing sinks.	30	
	7.7.1.2	**Toilet Facility Installation**		
convenient	**7.7.1.2.1**	Toilet rooms shall be provided and conveniently located.	**29**	**C**
handwashing facilities	**7.7.1.2.2**	Handwashing facilities shall be provided in or immediately adjacent to toilet rooms or vestibules.	**29**	**C**
sign	7.7.1.2.3	Signs shall be conspicuously posted on the bulkhead adjacent to the door of the toilet, reading "WASH HANDS AFTER USING TOILET" in a language that the food employees understand.	30	
enclosed/ doors	7.7.1.2.4	Toilet rooms shall be completely enclosed and shall have tight-fitting, self-closing doors which shall be kept closed except during cleaning or maintenance.	30	
waste receptacle	7.7.1.2.5	Easily cleanable receptacles shall be provided for waste materials.	30	
	7.7.1.3	**Handwashing and Toilet Facility Maintenance**		
accessible	**7.7.1.3.1**	Handwashing facilities shall be used for no other purpose and shall be accessible at all times.	**29**	**C**
facilities clean/ good repair	7.7.1.3.2	Handwashing facilities shall be kept clean and in good repair.	30	
soap/towels	7.7.1.3.3	Each handwashing facility shall have a supply of hand-cleansing soap or detergent and a supply of single-service paper towels available.	30	
toilets clean/good repair	7.7.1.3.4	Toilet fixtures shall be kept clean and in good repair.	30	
toilet tissue	7.7.1.3.5	A supply of toilet tissue shall be provided at each toilet at all times.	30	

7.7.2 Solid Waste

7.7.2.1 Receptacles and Containers

containers	7.7.2.1.1	Receptacles and waste-handling containers for refuse and recyclables and for use with materials containing food residue shall be durable, nonabsorbent, easily cleanable and leakproof.	32
insect/ rodent resistant	7.7.2.1.2	Receptacles and waste-handling containers for refuse, recyclables and for use with materials containing food residue shall be insect and rodent resistant and shall have tight-fitting lids.	32
covered/ provided	7.7.2.1.3	Receptacles and waste-handling containers shall be kept covered when not in continuous use and after they are filled.	32
location	7.7.2.1.4	A receptacle or waste-handling container shall be provided in each area of the vessel or premise where refuse is generated or commonly discarded or where recyclables are placed.	32
wash facilities	7.7.2.1.5	Facilities suitable for washing receptacles and waste-handling containers shall be provided separate from food equipment and utensil storage areas or food preparation areas.	32
design/ supplies	7.7.2.1.6	The designated container wash area shall be easily cleanable and shall have tempered water, access to detergent, and suitable drainage.	32
cleaned	7.7.2.1.7	Receptacles and waste-handling containers shall be cleaned when emptied.	32

7.7.2.2 Garbage and Refuse Storage Room

easily cleanable/ durable	7.7.2.2.1	The dry and refrigerated garbage and refuse storage room shall be constructed of easily cleanable, corrosion-resistant, nonabsorbent, and durable materials.	32
size	7.7.2.2.2	The garbage and refuse storage room shall be large enough to store and process the garbage and refuse.	32
prevent contamination	7.7.2.2.3	The garbage and refuse storage room shall be located so as to prevent contamination in food preparation, storage, and utensil washing areas.	32
good repair/clean	7.7.2.2.4	The garbage and refuse storage room shall be maintained in good repair and kept clean.	32

7.7.3 Liquid Waste Disposal and Plumbing

7.7.3.1 Drain Lines

drain lines 7.7.3.1.1 Drain lines from all fixtures, sinks, appliances, compartments, refrigeration units, or devices that are used, designed for, or intended to be used in the preparation, processing, storage, or handling of food, ice or drinks shall be indirectly connected to appropriate waste systems by means of an air-gap or air-break. 19

hand/mop sink drain lines 7.7.3.1.2 *Drain lines from handwashing and mop sinks may be directly connected to the appropriate waste system.*

overhead 7.7.3.1.3 Drain lines carrying sewage or other liquid waste shall not pass directly overhead or horizontally through spaces used for the preparation, serving, or storage of food or the washing or storage of utensils and equipment. Drain lines that are unavoidable in these food areas shall be sleeve-welded and shall not have mechanical couplings. 19

warewash sink/machine drains 7.7.3.1.4 All drain lines from warewashing sinks or machines shall drain through an air-gap or air-break to a drain or scupper. 28

7.7.3.2 Liquid Waste Disposal

discharge 7.7.3.2.1 Black and gray water shall be discharged to the vessel's wastewater disposal system and shall not pool on the deck. 35

leakage 7.7.3.2.2 The leakage of sewage tanks or discharge of sewage into the bilge or other areas on the vessel shall be prohibited. 35

7.7.3.3 Plumbing

good repair 7.7.3.3.1 A plumbing system in a food area shall be maintained in good repair. 34

7.7.4 Decks, Bulkheads, and Deckheads

7.7.4.1 Design and Construction

cleanable 7.7.4.1.1 Decks, bulkheads, and deckheads in food preparation, warewashing, pantries, and storage areas shall be constructed and maintained for easy cleaning. 33

non-skid 7.7.4.1.2 *Decks may be of non-skid construction provided they are easily cleanable.*

Coving	7.7.4.1.3	Bulkhead and deck junctures shall be coved (including galleys, pantries, deck/counter junctures at buffets, bars, waiter stations, and dining room work counters).	33
finishes	7.7.4.1.4	Bulkheads and deckheads shall have smooth, hard finishes, and light colored surfaces.	33
corrosion-resistant	7.7.4.1.5	Decks, bulkheads, and deckheads in food preparation, warewashing, pantries, and storage areas shall be corrosion-resistant.	33
attached equipment	7.7.4.1.6	Light fixtures, vent covers, and similar equipment attached to the bulkheads or deckheads shall be easily cleanable.	33
exposed lines	7.7.4.1.7	Exposed utility service lines and pipes, including lines for fire detection and protection systems, shall be installed so they do not obstruct or prevent cleaning.	33
cleanable surfaces	7.7.4.1.8	Surfaces subject to routine splashes, spillage or other soiling during normal use shall have easily cleanable features.	33
deck mats	7.7.4.1.9	Mats shall be designed to be removable and easily cleanable.	33
	7.7.4.2	**Maintenance**	
clean	7.7.4.2.1	Decks, bulkheads, deckheads, and attached equipment in food preparation, warewashing, pantries, and storage areas, shall be cleaned as often as necessary.	33
timing	7.7.4.2.2	Cleaning shall be done during periods when the least amount of food is exposed.	33
good repair	7.7.4.2.3	Decks, bulkheads, and deckheads in food preparation, warewashing, pantries, and storage areas, shall be maintained in good repair.	33
	7.7.5	**Lighting**	
	7.7.5.1	**Intensity**	
220 Lux/ 20 foot candles	7.7.5.1.1	The light intensity shall be at least 220 Lux (20 foot candles) on food preparation surfaces, and at a distance of 75 centimeters (30 inches) above the deck in food preparation areas, handwashing facilities, warewashing areas, equipment, and utensil storage, pantries, toilet rooms, and consumer self-service areas.	36

110 Lux/ 10 foot candles	7.7.5.1.2	The light intensity shall be at least 110 Lux (10 foot candles) at a distance of 75 centimeters (30 inches) above the deck when in use, in walk-in refrigerator units and dry storage areas, and in other areas and rooms during periods of cleaning.	36
during cleaning	7.7.5.1.3	In bars and dining room waiter stations provide 220 lux (20 foot candles) light intensity during cleaning operations.	36
	7.7.5.2	**Protected**	
shielded/ shatter-resistant	7.7.5.2.1	Light bulbs shall be shielded, coated, or otherwise shatter-resistant in areas where there is exposed food; clean equipment, utensils, and linens; or unwrapped single-service, and single-use articles.	36
heat lamps	7.7.5.2.2	An infrared or other heat lamp shall be protected against breakage by a shield surrounding and extending beyond the bulb so that only the face of the bulb is exposed.	36
	7.7.6	**Ventilation**	
	7.7.6.1	**Design and Operation**	
sufficient	7.7.6.1.1	All food preparation, warewashing, and toilet rooms shall have sufficient ventilation to keep them free of excessive heat, steam, condensation, vapors, obnoxious odors, smoke, and fumes.	37
effective	7.7.6.1.2	Ventilation hood systems and devices shall operate effectively to prevent grease and condensate from collecting on the bulkheads and deckheads and remove contaminants generated by equipment located under them.	37
no contamination	7.7.6.1.3	Heating, ventilating, and air conditioning systems shall be designed and installed so that make-up air intake and exhaust vents do not cause contamination of food, food-contact surfaces, equipment, or utensils.	37
	7.7.6.2	**Maintenance**	
filters	7.7.6.2.1	Filters and other grease extracting equipment shall be designed to be readily removable for cleaning and replacement if not designed to be cleaned in place. Intake and exhaust air ducts shall be cleaned and filters changed so they are not a source of contamination by dust, dirt, and other materials.	37

7.7.7 Cleaning Equipment and Unnecessary Articles

7.7.7.1 Storage

necessary articles 7.7.7.1.1 Only articles necessary for the food service operation shall be stored in food preparation, food storage, and warewashing areas. 38

cleaning locker 7.7.7.1.2 Maintenance tools such as mops, brooms, and similar items shall be stored in a designated locker so they do not contaminate food; food-contact surfaces of utensils; and equipment; linens, and single-service and single-use articles. 38

orderly manner 7.7.7.1.3 Maintenance tools such as mops, brooms, and similar items shall be stored in an orderly manner that facilitates cleaning of the area used for storing the maintenance tools. 38

mop drying 7.7.7.1.4 After use, mops shall be placed in a position that allows them to air-dry without soiling walls, equipment, or supplies. 38

7.7.7.1.5 *Wash, rinse, and sanitize buckets or other containers may be stored with maintenance tools provided they are stored inverted and nested.*

8.0 Integrated Pest Management

8.1 Integrated Pest Management
8.2 Pest Control

8.1 Integrated Pest Management

8.1.1 Plan Development and Implementation

8.1.1.1 IPM Plans

IPM plan	8.1.1.1.1	Each vessel shall develop an Integrated Pest Management Plan to address effective monitoring and control strategies for pests aboard the vessel.	40
monitoring	8.1.1.1.2	The Integrated Pest Management Plan shall set a schedule for periodic monitoring inspections including some at night.	40
logs	8.1.1.1.3	The Integrated Pest Management Plan shall include provisions for active monitoring including pest sighting logs for the operational areas of the vessel and training for crew members in charge of log completion.	40
passive surveillance	8.1.1.1.4	The Integrated Pest Management Plan shall include passive surveillance procedures such as glue traps and other monitoring tools, as well as location of each. A monitoring log on passive surveillance procedures shall be maintained.	40

8.1.1.2 Plan Evaluation

2 years	8.1.1.2.1	The vessel's Integrated Pest Management Plan shall be evaluated for effectiveness every 2 years or whenever there is a significant change in the vessel's structure such as a renovation or operation.	40
reviews	8.1.1.2.2	Reviews shall be documented and changes noted in the vessel's Integrated Pest Management Plan.	40
inspections	8.1.1.2.3	The vessel's Integrated Pest Management Plan documentation shall be made available during the VSP inspections.	40

8.1.2 IPM and Pesticide Use

8.1.2.1 Pesticide Application

records	8.1.2.1.1	The Integrated Pest Management Plan shall include a record of pesticides used. The record shall include only pesticides currently onboard the vessel and those used in the previous 12 months.	40	
restricted-use	8.1.2.1.2	A restricted-use pesticide shall be applied only by a certified applicator or a person with training and testing equivalent to that of a certified applicator.	39	C
applicator training	8.1.2.1.3	The training of the pest-control personnel shall be documented in the Integrated Pest Management Plan.	40	
safety	8.1.2.1.4	The Integrated Pest Management Plan shall establish health and safety procedures to protect the passengers and crew.	40	

8.2 Pest Control

8.2.1 Exclusion

8.2.1.1 Food Areas

effective control	8.2.1.1.1	The presence of insects, rodents, and other pests shall be effectively controlled to minimize their presence in the food storage, preparation, and service areas and warewashing and utensil storage areas aboard a vessel.	39	C
exclusion	8.2.1.1.2	Entry points where pests may enter the food areas shall be protected.	40	
incoming food supplies	8.2.1.1.3	Incoming shipments of food and supplies shall be routinely inspected for evidence of insects, rodents, and other pests. A record of these inspections shall be maintained onboard the vessel and shall be available for review during inspections.	40	
IPM inspections	8.2.1.1.4	The vessel's food areas shall be inspected under the Integrated Pest Management Plan at a frequency that can quickly detect the evidence of pests or the creation of harborage conditions.	40	

8.2.2 Control Measures

8.2.2.1 Chemical

chemical controls	8.2.2.2.1	Chemical control measures shall conform to products and application procedures specifically allowed in the food safety section of these guidelines and the vessel's Integrated Pest Management Plan.	39	C

8.2.2.2 Physical

insect-control devices	8.2.2.2.1	Insect-control devices that are used to electrocute or stun flying insects shall be designed to retain the insect within the device.	40	
food protection	8.2.2.2.2	The insect devices shall not be located over food storage, preparation, and service areas. Dead insects and insect fragments shall be prevented from being impelled onto or falling on exposed food.	19	
utensil protection	8.2.2.2.3	The insect devices shall not be located over warewashing, utensil storage areas, equipment, utensils, linens, unwrapped single-service, and single-use articles. Dead insects and insect fragments shall be prevented from being impelled onto or falling on clean items.	28	
cleaning	8.2.2.2.4	Dead or trapped insects, rodents, and other pests shall be removed from control devices and the vessel at a frequency that prevents their accumulation or decomposition, or the attraction of pests.	40	

9.0 Housekeeping

9.1 Infection Control Procedures

9.1.1 Disinfection

9.1.1.1 Public Areas

public areas 9.1.1.1.1 When the cumulative proportion of cases of gastrointestinal illness among passengers or crew members is ≥2%, the infection control response shall include cleaning and disinfecting all public areas, including handrails and restrooms, on a continuous basis until the proportion decreases to <2%. 41

written OPRP 9.1.1.1.2 Each vessel shall have a written Outbreak Prevention and Response Plan (OPRP) which details the standard procedures and policies to specifically address gastrointestinal illness onboard. The written OPRP shall include at a minimum, the following: 41

(a) Duties and responsibilities of each department and their staff

(b) Steps in outbreak management and control and the trigger for each step

(c) A detailed example OPRP is provided in the VSP website at http://www.cdc.gov/nceh/vsp.

public toilet facilities 9.1.1.1.3 Public toilet facilities shall be equipped so that persons exiting the toilet room are not required to handle the door with bare hands. *This may be accomplished by methods such as locating paper towel dispensers at sinks and waste containers near the room door, installing mechanically operated doors, door removal, or other effective means.* 41

9.1.2.1 Cabins

cabin cleaning 9.1.2.1.1 Cabins that house passengers or crew with gastrointestinal illness shall be thoroughly cleaned and disinfected daily while the occupants are ill. 41

precautionary measures 9.1.2.1.2 Extra precautionary measures by housekeeping personnel shall be taken in consultation with the vessel's medical staff to prevent the spread of gastrointestinal illness from cabin to cabin. 41

example 9.1.2.1.3 *Precautionary measures by the housekeeping personnel may include using disposable personal protection equipment, including gloves, which are changed after each cabin.*

9.2 Air Systems

9.2.1 Design and Maintenance

9.2.1.1 Construction

condensate pans	9.2.1.1.1	Air handling unit condensate drain pans and collection systems shall be accessible for inspection, maintenance, and cleaning. Installation of sight windows or other effective methods for full inspection and cleaning of condensate collection pans shall be utilized when original equipment access makes evaluation during operational inspections impractical.	41
self-draining	9.2.1.1.2	Air condition condensation collection pans shall be self-draining.	41

9.2.1.2 Maintenance

air handling units	9.2.1.2.1	Air handling units shall be kept clean.	41
condensers	9.2.1.2.2	Evaporative condensers shall be inspected at least annually and cleaned as necessary to remove scale and sediment. Cooling coils and condensate pans shall be cleaned as necessary to remove dirt and organic material.	41
inspection and maintenance plan	9.2.1.2.3	Vessels shall have a plan to inspect and maintain heating, ventilation, and air-conditioning systems in accordance with manufacturers recommendations and industry standards. The written inspection, cleaning, and maintenance plan for the heating, ventilation, and air-conditioning system shall be maintained on the vessel and available for review during inspections.	41

9.2.1.3 Dust Control

cleaning	9.2.1.3.1	Carpets, curtains, drapes, furniture, decks, lighting fixtures, and decorative items on the vessel shall be cleaned to minimize accumulation of dust and soil.	41
methods	9.2.1.3.2	Dustless cleaning methods shall be used.	41

9.3 Fountains, Humidifiers, and Showers

9.3.1 Fountains and Humidifiers

9.3.1.1 Water Source

sprays	9.3.1.1.1	Water used in conjunction with decorative fountains and water sprays in HVAC air- distribution systems shall originate in the vessel's potable water system and shall be further treated to	41

avoid microbial build-up in the operation of the sprays and fountains.

9.3.1.2 Fountain and Water Spray Maintenance

clean 9.3.1.2.1 Decorative fountains and water sprays in HVAC air- distribution systems shall be maintained free of algae and mold. 41

9.3.2 Hot-Water System and Showers

9.3.2.1 Maintenance

hot-water system 9.3.2.1.1 The potable hot-water system including shower heads shall be maintained to preclude growth of ***Mycobacterium*** or ***legionella***. 41

showers 9.3.2.1.2 Shower heads shall be cleaned and disinfected every 6 months to preclude growth of ***Mycobacterium*** or ***legionella***. 41

10.0 Child-Activity Centers

10.1 Diaper Changing

10.1.1 Diaper-Changing Facilities

10.1.1.1 Design

diaper changing 10.1.1.1.1 If children who wear diapers are accepted in the child-activity center, diaper-changing stations and disposal facilities shall be provided. 41

facilities 10.1.1.1.2 Each station shall include: 41

(1) A changing table that is impervious, nonabsorbent, nontoxic, smooth, durable, and cleanable, and designed for diaper changing;

(2) A supply of disposable diapers, gloves, wipes, table cleanser, and disinfectant;

(3) An airtight, soiled-diaper receptacle; and

(4) An adjacent handwashing station.

signs 10.1.1.1.3 Signs shall be posted in the diaper-changing area advising handwashing after each diaper change. 41

10.2 Toilets and Handwashing

10.2.1 Facilities

10.2.1.1 Design

child-size toilet	10.2.1.1.1	Child-size toilet and handwashing facilities shall be provided, if toilet rooms are located in a child-activity center.	41
toilet supplies	10.2.1.1.2	Each toilet facility shall be provided with a supply of toilet tissue, disposable gloves, and sanitary wipes.	41
waste receptacle	10.2.1.1.3	An airtight, washable, waste receptacle shall be conveniently located to dispose of excrement, soiled sanitary wipes that cannot be disposed of in the toilet and gloves. Waste materials shall be removed from the child-activity center each day.	41
handwashing supplies	10.2.1.1.4	Soap, paper towels or air dryers, and waste towel receptacle shall be located at handwashing stations.	41
signs	10.2.1.1.5	Signs shall be posted in children's toilet room advising the providers to wash their hands and the children's hands after assisting children use the toilet.	41
assistance	10.2.1.1.6	Children under 6-years old shall be assisted in washing their hands in the child-activity center after using the toilet room, before eating, or after otherwise contaminating their hands.	41
separate	10.2.1.1.7	Separate toilet facilities shall be provided for child activity center staff.	41

10.3 Cleaning and Disinfection

10.3.1 Furnishings and Toys

10.3.1.1 Construction

cleanable	10.3.1.1.1	Surfaces of tables, chairs, and other furnishings that children touch with their hands shall be cleanable.	41
construction	10.3.1.1.2	Toys used in the child-activity center shall be maintained in a clean condition.	41

10.3.1.2 Procedures

hard surfaces	10.3.1.2.1	Surfaces that children touch with their hands shall be cleaned and disinfected at least daily with products labeled by the manufacturer for that purpose.	41
toy cleaning/ ball pits	10.3.1.2.2	Toys used in the child-activity center shall be cleaned and disinfected daily. Balls used in ball pits/pens shall be cleaned at least once per week, unless otherwise contaminated.	41
tables/ high chairs	10.3.1.2.3	Tables or high chair trays shall be cleaned and disinfected before and after they are used for eating.	41
decks	10.3.1.2.4	Carpeting shall be vacuumed at least daily and shall be periodically cleaned when it becomes visibly soiled. Decks shall be mopped and disinfected when soiled or at least daily.	41
facility cleaning/ disinfecting	10.3.1.2.5	Diaper changing and handwashing facilities and toilet rooms shall be cleaned and disinfected when soiled during use and at least daily.	41

10.3.1.3 Linens

linens laundered	10.3.1.3.1	Linens such as blankets, sheets, and pillow cases shall be laundered between each use.	41

10.4 Exclusions

10.4.1 Children with Infectious Illness

10.4.1.1 Procedures

written guidance 10.4.1.1.1 Written guidance on symptoms of common childhood infectious illnesses shall be maintained in the child-activity center. 41

illness policy 10.4.1.1.2 The child-activity center shall have a written policy on procedures to be followed when a child develops symptoms of an infectious illness while at the center. 41

infectious illness 10.4.1.1.3 Children with infectious illness shall not be allowed in the child-activity center without permission of the vessel's medical staff. 41

11.0 Administrative Guidelines

11.1 Inspections

11.1.1 Inspection Procedures

routine inspections 11.1.1.1 An unannounced, complete sanitation inspection by VSP Environmental Health Officers (EHOs) shall be done twice each federal fiscal year, if the vessel is available.

inspectors 11.1.1.2 VSP EHO's shall be trained in the interpretation and application of the USPHS / CDC / VSP Operations Manual.

boarding 11.1.1.3 The VSP EHO shall board the vessel and immediately inform the master of the vessel or a designated agent that a vessel sanitation inspection is to be conducted.

sequence 11.1.1.4 The VSP EHO shall then conduct the inspection in a logical sequence until the EHO has completed the inspection of all areas identified in this manual.

imminent health hazard detection 11.1.1.5 The VSP EHO shall contact the master of the vessel or a designated agent and the Chief, VSP, immediately during an inspection about a possible recommendation that the vessel not sail, if an imminent health hazard as specified in section 11.9.2 is found to exist on the vessel and if these deficiencies possibly cannot be corrected before the inspection is completed.

incomplete inspections 11.1.1.6 The inspection shall be completed in the same visit once it has begun. In the event that the inspection cannot be completed, the results of an incomplete inspection shall be discussed with the vessel's staff. A complete inspection shall be conducted at a later date.

11.2 Inspection Report

11.2.1 Draft Report

provided 11.2.1.1 The VSP EHO shall provide a draft inspection report to the master of the vessel, or a designated agent, at the conclusion of the inspection.

information 11.2.1.2 The draft inspection report shall provide administrative information, gastrointestinal illness log review details, and inspection score.

deficiency descriptions 11.2.1.3 The draft inspection report shall provide a written description of the items found deficient and where the deficiency was observed.

11.2.2 Final Report

report form 11.2.2.1 The VSP EHO shall use the Vessel Sanitation Inspection Report (Annex 13.8) to summarize the inspection score. The inspection report shall contain the following elements:

administrative 11.2.2.2 Administrative information that identifies the vessel and its master or designee and the numerical rating when the credit point values for all observed deficiencies are subtracted from 100.

deviations 11.2.2.3 The item number and the credit point value for that item number shall be indicated if the vessel does not meet the Operations Manual standard for that item.

medical review 11.2.2.4 The medical documentation (e.g.; GI logs, medical logs, special reports, etc.) shall be available for review by VSP for accuracy and timeliness of reporting.

report detail 11.2.2.5 A written description of the items found deficient shall be included. The deficiencies shall be itemized with references to the section of the Operations Manual. The description shall include the deficiency location and Operations Manual section citation.

11.3 Risk-Based Scoring and Correction Priority

11.3.1 Scoring System

weighted items 11.3.1.1 The inspection report scoring system is based on inspection items with a total value of 100 points.

risk-based 11.3.1.2 Inspection items are weighted according to their probability of increasing the risk for a gastrointestinal disease outbreak.

critical items 11.3.1.3 Critical items are those with a weight of 3 to 5 credit point values on the inspection report.

critical designation 11.3.1.4 Critical items are designated in this Operations Manual with a red **C** to the right of the inspection report item number which is also shown in red. The section numbers of the critical items in this Operations Manual are also provided in red.

noncritical items 11.3.1.5 Noncritical items are those with a weight of 1 to 2 credit point values on the inspection report.

scoring 11.3.1.6 Each weighted deficiency found on an inspection shall be deducted from 100 possible credit points.

11.3.2 Risk-Based Correction Priority

critical correction time frame 11.3.2.1 A vessel shall at the time of inspection correct a critical deficiency of this Operations Manual and implement a corrective- action plan for monitoring the critical item for continued compliance.

extension 11.3.2.2 *Considering the nature of the potential hazard involved and the complexity of the corrective action needed, the VSP may agree to, or specify, a longer time frame, not to exceed 10 calendar days after the inspection, for the vessel to correct critical deficiencies.*

11.4 Closing Conference

11.4.1 Procedures

closing conference 11.4.1.1 The results of the inspection shall be explained to the master or a designee before the VSP EHO leaves the vessel.

report copy 11.4.1.2 A copy of the draft inspection report shall be left with the master or designee. The report shall be reviewed in detail and opportunity provided for discussions of the findings. The draft report is provided so that the vessel personnel can begin correcting deficiencies immediately.

invoice 11.4.1.3 The master or a designee shall be provided with a payment invoice for a signature. The VSP EHO shall provide one copy of the signed invoice to the master or designee and shall

forward one copy to the vessel's company office along with the final inspection report.

fee schedule 11.4.1.4 The fee for inspections shall be based on the existing fee schedule for routine inspections of passenger cruise vessels, published annually in the Federal Register.

11.5 Inspection Review

11.5.1 Inspection Report Review Requests

contested results 11.5.1.1 If the master disagrees with the findings, the master shall notify the VSP EHO during the closing conference of the intent to request a review of the specific items being contested, and the substantive reasons for disagreement.

If a designated corporate official disagrees with the findings, the corporate official may submit a request to review the inspection. This request must be submitted to VSP within 48 hours of the closing conference.

interim report 11.5.1.2 An interim report shall be completed at the request of the owner or operator if an inspection is under review, indicating the item(s) under review. The VSP shall modify the final inspection report, as necessary, after the review by the Chief, VSP.

report remarks 11.5.1.3 After receiving a request for review, the VSP EHO shall mark the vessel's inspection report as under review at the request of the vessel owner or operator.

written request 11.5.1.4 The vessel owner or operator shall make a written request for review within 2 weeks of the inspection with specific reference and facts concerning the contested deficiencies that the VSP EHO documented during the inspection.

address 11.5.1.5 The written request shall be sent to:

Chief, Vessel Sanitation Program Branch
National Center for Environmental Health
Centers for Disease Control and Prevention
4770 Buford Hwy NE, Mailstop F 23
Atlanta, GA 30341-3724
USA

11.5.2 Inspection Report Review Procedures

review 11.5.2.1 The Chief, VSP, shall review the matter and respond within 2 weeks of receiving the request for a review. In the response, the Chief, VSP, shall state whether the inspection report is to

be changed.

no score 11.5.2.2 No numerical score shall be published before the Chief, VSP, makes a final determination on the review. Publication of inspection results shall indicate the vessel's status as under review at the request of the vessel owner or operator.

report copies 11.5.2.3 Copies of the contested inspection results that are released before the Chief, VSP, makes a final determination on the review shall have each contested deficiency clearly marked as under review at the request of the vessel owner or operator.

final report 11.5.2.4 The interim report shall be issued as a final report if the written request for review is not received within 2 weeks of the inspection.

appeal 11.5.2.5 If the ship owner does not agree with the review and decision of the Chief VSP, they may appeal the decision to the Director, Division of Emergency and Environmental Health Services, National Center for Environmental Health.

11.5.3 Other Recommendations Review

review 11.5.3.1 A vessel owner or operator shall have the right to request a review of recommendations made during a technical consultation, or an inspection, if the owner or operator believes that VSP officials have imposed requirements inconsistent with or beyond the scope of this manual.

written request 11.5.3.2 The owner or operator shall send a written statement explaining the problem in detail to the Chief, VSP, within 30 days of the date the recommendation was made.

review 11.5.3.3 The Chief, VSP, shall review the issue and respond within 2 weeks of receiving the statement, advising whether the recommendation shall be revised.

appeal 11.5.3.4 If the ship owner does not agree with the review and decision of the Chief VSP, they may appeal the decision to the Director, Division of Emergency and Environmental Health Services, National Center for Environmental Health.

11.6 Corrective Action Statement

11.6.1 Procedures

corrective actions

11.6.1.1 A signed corrective-action statement (Annex 13.9) shall be submitted to the Chief, VSP, by the master, owner or operator which details each deficiency identified during the inspection, and the corrective action taken.

critical-corrective actions

11.6.1.2 Critical-item deficiencies shall also include standard operating procedures and monitoring procedures implemented to prevent the recurrence of the critical deficiency.

clarification requests

11.6.1.3 The corrective-action statement may contain requests for clarification of items noted on the inspection report. The request for clarification shall be included in the cover letter from the vessel's master, owner, or operator. Clarification of these items will be provided back to the requestor, in writing, by the Chief, VSP, or the EHO who conducted the inspection in question.

public distribution

11.6.1.4 The corrective-action statement shall be appended to the final inspection report for future reference and, if requested, made available for public distribution.

same score

11.6.1.5 A corrective-action statement shall not affect the inspection score.

11.7 Correction Affidavit

11.7.1 Procedures

procedures

11.7.1.1 An affidavit of correction from the owner or operator, certifying that corrective action has been completed, may be submitted to the Chief, VSP. The procedure may be used only one time for an item. The item shall be structure- or equipment-related, and it shall be corrected within a reasonable period.

conditions

11.7.1.2 At least one of the following conditions shall apply for an item to qualify for an affidavit of correction:

(1) It shall be a longstanding deficiency that has not been identified during previous inspections; or

(2) It shall be a deficiency in which the function of the equipment is being accomplished by an alternative method.

requested at inspection

11.7.1.3 After the inspection, but before the VSP EHO leaves the vessel, the vessel's master or a representative shall provide

notification of the intent to submit an affidavit of correction. This notice shall specify the deficiency(s) to be corrected and the corrective action to be taken. The draft inspection report will include a notation of the items to be corrected.

final inspection score

11.7.1.4 Upon acceptance of the affidavit, the final inspection score will be recalculated to include credit for the items corrected.

11.8 Inspection Publication

11.8.1 Methods

report availability on website

11.8.1.1 CDC shall publish an announcement of inspections performed in the *Summary of Sanitation Inspections of International Cruise Ships* on the VSP Web site http://www.cdc.gov/nceh/vsp.

data

11.8.1.2 The announcement shall include, at a minimum, the names of the vessels in the inspection program, the dates of their most recent inspections, and the numerical score achieved by each vessel.

public record

11.8.1.3 Reports, including the corrective-action statement, shall be available to the public upon request.

11.9 Recommendation that the Vessel Not Sail

11.9.1 Imminent Health Hazards

imminent health hazard

11.9.1.1 An imminent health hazard shall be determined to be, but not limited to, one of the following situations:

potable water halogen

(1) Free halogen residual in the potable water distribution system is less than 0.2 mg/L (ppm) and this deficiency is not corrected before the inspection ends;

PHF temperature facilities

(2) Inadequate facilities for maintaining safe temperatures for potentially hazardous food;

cleaning and sanitizing

(3) Inadequate facilities for cleaning and sanitizing equipment;

liquid/solid waste

(4) Continuous problems with liquid and solid waste disposal, such as inoperative or overflowing toilets or shower stalls in passenger and crew member cabins; or

disease outbreak

(5) Infectious disease outbreak among passengers or crew, and where it is suspected that continuing normal operations may subject newly arriving passengers to disease.

11.9.2 Procedures

notify Chief, VSP 11.9.2.1 The VSP EHO shall immediately notify the Chief, VSP, when any of these imminent health hazards or similar imminent threats to public health are found aboard a vessel.

no sail 11.9.2.2 CDC shall recommend or direct the master of a vessel not to sail when an imminent health hazard is identified and cannot be immediately corrected. Such a recommendation shall be signed by the Chief, VSP, with concurrence of the Director, National Center for Environmental Health, or the Director's designee.

11.10 Re-inspection and Follow-Up Inspections

11.10.1 Re-inspection Procedures

failing vessels re-inspections 11.10.1.1 A re-inspection is a complete sanitation inspection performed on vessels that, on the previous inspection, did not score at least 86.

reasonable time 11.10.1.2 Vessels that fail on a routine inspection shall be reinspected within a reasonable time, depending on:

(1) Vessel schedules; and

(2) Receipt of the corrective-action statement from the vessel's management.

unannounced 11.10.1.3 Re-inspections shall be unannounced.

no sail re-inspections 11.10.1.4 If such a no sail recommendation is made, a follow-up inspection shall be conducted as soon as requested.

scheduling priority 11.10.1.5 In scheduling inspections, VSP shall give priority to the re-inspection of those vessels that failed the routine inspection.

one re-inspection 11.10.1.6 Vessels that fail a routine inspection shall undergo only one re-inspection.

written requests 11.10.1.7 *Exceptions may be made, when the owner or operator submits a written request for an additional re-inspection to the Chief, VSP stating the reasons why the additional re-inspection is warranted.*

unannounced /inspection fee 11.10.1.8 These additional re-inspections shall be unannounced and the vessel shall be charged the standard inspection fee.

11.10.2 Follow-Up Inspection Procedures

follow-up 11.10.2.1 A follow-up inspection is a partial inspection to review the status of deficiencies identified during the previous periodic

inspection or re-inspection.

not periodic or re-inspection 11.10.2.2 A follow-up inspection cannot be a substitute for a periodic or re-inspection.

follow-up reasons 11.10.2.3 Follow-up inspections may be conducted to resolve a contested inspection; or inspect imminent health hazards that resulted in a recommendation to prohibit the vessel from sailing.

next arrival 11.10.2.4 These inspections shall be conducted as soon as possible after the routine inspection or re-inspection, preferably the next time the vessel arrives at a U.S. port.

limited 11.10.2.5 They shall be limited to inspection of deficiencies in question. For example, if an item under the refrigerator section of the inspection was found to be a deficiency and was the only item contested, only refrigeration would be checked during the follow-up inspection.

other items 11.10.2.6 Any other problems noted during the follow-up inspection shall be brought to the attention of the vessel's master or designee so that the deficiencies can be corrected.

no score 11.10.2.7 There shall be no inspection score provided nor fee charged for these follow-up inspections.

11.11 Construction /Renovation Inspections

11.11.1 Procedures

construction 11.11.1.1 Whenever possible, the VSP staff shall conduct inspections of vessels being constructed or undergoing major retrofits upon the request of the vessel owner or operator.

requesting inspection 11.11.1.2 An official written request shall be submitted to the Chief, VSP, requesting a voluntary construction renovation inspection. CDC's ability to honor these requests shall be based on the availability of VSP staff.

time frame 11.11.1.3 Construction / renovation inspections shall normally be conducted at the shipyard 4 to 6 weeks before completion. An additional inspection may also be conducted upon completion of the work and before the vessel enters operational status.

construction compliance 11.11.1.4 Construction / renovation inspections shall document the vessel's compliance with CDC's *Vessel Sanitation Program Construction Guidelines*, which provides a framework for consistency in the sanitary design, construction, and construction inspections of cruise vessels.

new vessels 11.11.1.5 The CDC *Vessel Sanitation Program Construction Guidelines* shall apply to all new vessels in which the keel is laid after June 1, 2005.

major retrofits 11.11.1.6 The construction guidelines shall also apply to major retrofits planned after June 1, 2005.

minor retrofits 11.11.1.7 These guidelines shall not apply to minor retrofits.

fee schedule 11.11.1.8 The fee for these construction / renovation inspections shall be based on the existing fee schedule for routine inspections.

11.11.2 Construction / Renovation Inspection Reports

report 11.11.2.1 A written report shall be issued by the VSP after a construction / renovation inspection. These reports shall summarize any changes recommended to ensure conformity with CDC guidelines.

guides 11.11.2.2 The reports prepared by VSP personnel in the shipyards during construction shall be used as guides if VSP conducts a final construction / renovation inspection on the vessel before the vessel enters operational service.

no score 11.11.2.3 No score shall be given for construction / renovation inspections.

11.12 Other Environmental Investigations

11.12.1 Procedures

environmental investigations

11.12.1.1 The VSP may conduct or coordinate other activities such as: investigating disease outbreaks; checking a specific condition such as halogen residual in the potable water distribution system; or investigating complaints of unsanitary conditions on a vessel.

problems noted

11.12.1.2 Public health problems noted during other environmental investigations shall be brought to the attention of the vessel's master or designee when these investigations are performed.

no score

11.12.1.3 There shall be no inspection score provided nor fee charged for other environmental investigations.

11.13 Variances

11.13.1 Procedures

variance procedures

11.13.1.1 The VSP may grant a variance by modifying or waiving the requirements of this Operations Manual if in the opinion of the VSP a health hazard or nuisance will not result from the variance.

VSP records

11.13.1.2 If a variance is granted, the VSP shall retain the information in its records for the vessel or, if applicable, multiple vessels.

vessel records

11.13.1.3 If a variance is granted, the vessel using the variance shall retain the information in its records for ready reference.

11.13.2 Documentation

detailed justification

11.13.2.1 Before a variance from a requirement of this Operations Manual is approved, the information that shall be provided to the VSP by the person requesting the variance and retained in the VSP's file on the vessel or vessels shall include:

section specific

(1) A statement of the proposed variance of the Operations Manual requirement citing relevant section numbers;

hazard analysis

(2) An analysis of the rationale for how the potential public health hazards and nuisances addressed by the relevant Operations Manual requirement will be alternatively addressed by the proposal;

HACCP/ procedures/ training/ monitoring

(3) If required, a HACCP plan, standard operating procedures, training plan and monitoring plan that includes all the information as it is relevant to the variance requested; and

scientific/ supporting data

(4) Additional scientific data or other information as required to support the determination that public health will not be compromised by the proposal.

11.13.3 Conformance

11.13.3.1 If the VSP grants a variance, the vessel shall:

conformance

(1) Comply with the HACCP plans, standard operating procedures, training plan, and monitoring plan that are submitted and approved as a basis for the modification or waiver; and

records

(2) Maintain and provide to the VSP, upon request, records that demonstrate that procedures monitoring critical-control points are effective, monitoring of the critical-control points are routinely employed, necessary corrective actions are taken if there is failure at a critical-control points and periodic verification of the effectiveness of the operation or process protects public health.

rescinding variance

11.13.3.2 The variance approval may be rescinded at any time for noncompliance with these conditions or if it is determined that public health has the potential of being compromised.

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