

HACCP Plan Requirements

A. Priority Assessment Information

- a. *Food involved in the HACCP Plan* – Provide a list of the foods involved and all ingredients used to prepare any food handled in the special process.
- b. *Food service system* – Specify the food preparation and service system you will use. For instance, will you be smoking for preservation, curing for preservation, cook-chill, sous vide, or reduced oxygen packaging (ROP)?
- c. *Equipment and materials involved in the HACCP Plan* – Provide a list of equipment and materials used in the HACCP plan. For instance, for ROP you would list the equipment used to bag the food, and the types of bags that are filled.
- d. A list of all facilities, including location and facility ID number this HACCP Plan pertains to.

Note: If the process described in this plan affects multiple locations and the process is carried out in each facility in exactly the same manner, one HACCP Plan is sufficient. Separate plans will be needed if more than one process is carried out. For example, if both cook-chill and sous vide are performed, separate HACCP Plans will be required for each process.

B. Process Flow Diagram

- a. Provide a detailed diagram of the flow of food through your process starting with receiving and storage and continuing through the service, or discard, of the food.
- b. Identify all Critical Control Points (CCPs) on the flow diagram with cross references on your HACCP worksheets. See the *HACCP Decision Tree for CCPs* for help identifying CCPs.

C. Hazard Analysis Worksheet

- a. For each food grouping or recipe, fill out a Hazard Analysis Worksheet.
- b. Circle/check the operational steps that are of concern on the left side of the sheet.
- c. Under the Hazards side of the sheet, fill in any hazards that are of concern depending on the ingredients. Be mindful of pathogens that could be introduced by employees. The issues need to be identified on the Hazard Analysis Worksheet. See *Guide to Hazards* for help identifying issues. Some hazards will fit into more than one category; however, they only need to be captured one time. For example, Norovirus could be listed under Viruses **and** Fecal/Oral Route Hazards. As long as it is captured in one of the categories, that will be sufficient.
- d. Be aware that not all hazards can be controlled at CCPs. Some of the identified hazards can be addressed through Standard Operating Procedures (SOPs). Samples are included with this document. An example of a hazard that might not be controlled at a CCP would be Norovirus. SOPs that could be utilized to control for Norovirus are No Bare Hand Contact with Ready to Eat Food (NBHC with RTE food), Proper Hand washing procedures, and an implemented and effective Employee Health Policy.

D. HACCP Worksheet

- a. Working from the process flow chart, list all CCPs under Critical Control Points on the HACCP Worksheet.
- b. Working from the Hazard Analysis Worksheet, list all hazards under Hazards on the HACCP Worksheet. Hazards identify the organisms of concern.
- c. Identify those hazards that cannot be controlled at a CCP. These hazards will need to be addressed in a SOP. For example, to control for Norovirus, SOPs will be needed to address employee health, hand washing, and NBHC with RTE food. These SOPs should be listed under the **Prerequisite Programs** and must be submitted along with the HACCP Plan.

d. Working from the CCPs, fill in the remainder of the chart.

- i. List the Critical Limit for the CCP. For example, cooking of chicken has a limit of 165°F for 15 seconds.
- ii. Describe how monitoring will take place and who will be responsible for monitoring. For example, the line cook will take the temperature using a calibrated thermometer when food has finished cooking to ensure the critical limit has been reached.
- iii. List the corrective action that shall be taken if the critical limit is not reached and who is the responsible party for ensuring the corrective action is followed. For example, the chicken shall be returned to cooking to reach and internal temperature of 165°F for 15 seconds.
- iv. List who is responsible to verify that the plan has been followed. For instance, the chef or kitchen manager will review records to ensure the process has been followed, and that all critical limits have been met.
- v. List the type of records that must be maintained to monitor CCPs. For example, temperature logs with corrective actions logs are to be maintained.

E. Other Supporting Documentation

- a. Submit blanks of all log sheets. Examples could be cooling logs, temperature logs, pH meter calibration logs, etc.
- b. Submit all SOPs. For example, Hand washing, Calibration of thermometers, Calibration of pH meters.
- c. Submit a plan for training of employees involved in the process. Employees involved in the process must be trained, and training logs must be maintained for all training that is done.
- d. Should your plan require a **Processing Authority** or a **Challenge Study**, the documentation shall be submitted at the same time the HACCP Plan is submitted.
- e. All support documentation shall be submitted at the same time as the HACCP Plan.

F. Additional Requirements by Process

a. **Smoking** – If your operation is smoking food as a method of preservation, rather than for flavor enhancement, a HACCP Plan is required. If you are smoking food, but during the smoking process the food reaches required internal minimum cooking temperatures, a HACCP Plan may not be required.

You must provide written validation of the HACCP Plan and process from a **Processing Authority** which utilized the National Advisory Committee on Microbiological Criteria for Foods (NACMCF).

You must provide all other applicable SOPs and Logs required for your plan.

b. **Curing** – Provide written validation of the HACCP Plan and process from a **Processing Authority** which utilized the National Advisory Committee on Microbiological Criteria for Foods (NACMCF).

You must provide all other applicable SOPs and Logs required for your plan.

c. **Reduced Oxygen Packaging with Two Barriers** – The 1st barrier will be temperature control at 41°F or less. Product will have a 14 day shelf life. *If your plan includes placing raw foods in ROP and you are adding ingredients to the bag, such as marinades or seasonings, you must list this on your ingredient list.* You may need to provide third party lab confirmation on the pH and/or water activity of any added ingredients.

The second barrier shall be one of the following:

- The water activity of the product is 0.91 or less. You must provide third-party laboratory confirmation of water activity of the product when submitting your plan.
- The pH of the product is 4.6 or below. Provide third-party laboratory confirmation of the pH of the product when submitting your plan.

- Provide proof that the meat or poultry product was cured at a Food Processing Establishment regulated by the USDA using substances specified in 9 CFR 424.21 *Use of Food Ingredients and Sources of Radiation* and is received as an intact package.
- The food has a high level of competing organisms including but not limited to raw meat, raw poultry, or raw vegetables.

The following are additional required documents for Reduced Oxygen Packaging (ROP) with two barriers:

- Provide a sample of your facility's cold holding refrigeration logs, and include information about how often temperatures will be monitored, and by whom.
- Provide all other applicable SOPs required for your plan.
- Provide the methodology for meeting the labeling requirements listed under 3-502.12(B), and provide a sample label.

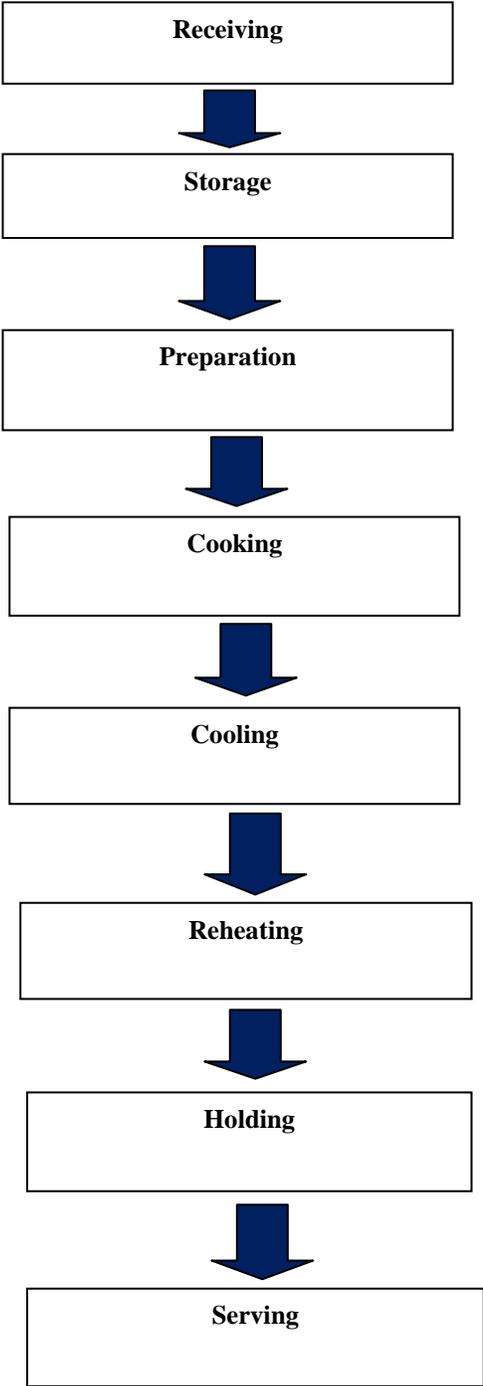
d. Cook-Chill or Sous Vide Cooking

- Provide a signed statement that food prepared by cook-chill and/or sous vide will be prepared and consumed on the premises, or prepared and consumed off the premises but within the same business entity, and that no sale or distribution of the packaged product to another business entity or consumer will occur.
- Provide a signed statement that one or both of the following statement(s) is/are true: (1) Food produced using a cook-chill system will be bagged while the food is above 135°F, and/or (2) Food produced using a sous vide process will be bagged immediately before cooking.
- Provide proof of electronic monitoring on all refrigeration units holding cook-chill or sous vide foods.
- Provide proof of electronic monitoring during transportation if cook-chill or sous vide food is transported off-site to a satellite location of the same business entity.
- Provide method of checking for the electronic monitoring system, including frequency and who will be responsible. Provide a sample of the log.
- Provide all other applicable SOPs and logs required for your plan.

e. Reduced Oxygen Packaging of Cheese

- Product shall have a shelf life of up to 30 days, and shall not exceed manufacturer's expiration date.
- Cheese may only be portioned and packaged. No additional ingredients are permitted.
- Provide documentation that the cheese(s) is/are commercially manufactured in a food processing plant with no ingredients added. The product must meet the Standards of Identity as specified in 21 CFR 133.150 Hard cheese, 21 CFR 133.169 Pasteurized process cheese, or 21 CFR 133.187 Semisoft cheeses.
- Provide labeling on the principal display panel with a "use by" date that does not exceed 30 days from its packing, or the original manufacturer's "sell by" or "use by" date, whichever occurs first. The ROP cheese shall be discarded if not sold for off-premises consumption or consumed within 30 days of its packaging.
- Provide all other applicable SOPs and logs required for the plan.

Simple Process Flow Diagram Example



Hazards Analysis
Worksheet

Operational Steps

RECEIVING

STORAGE

PREPARATION

COOKING

COOLING

REHEATING

HOLDING

SERVING

Establishment Name:

Recipe:

Hazards

Vegetative Bacteria:

Spore- Forming / Toxin- Producing Bacteria:

Fecal / Oral Route Hazards:

Viruses:

Parasites:

Chemical Hazards:

Naturally Occurring Chemical Toxins:

Additives, etc.

PATHOGENS FOR COMMON FOODS

(This list is not inclusive, only common pathogens of concern are listed)

CEREAL CROPS: BACILLUS CEREUS

CHEESE (soft): LISTERIA MONOCYTOGENES

DAIRY AND MILK: SALMONELLA, LISTERIA MONOCYTOGENES, SHIGELLA SPP., STAPHYLOCOCCUS AUREUS

EGGS: SALMONELLA

FISH: BACILLUS CEREUS, SALMONELLA, VIBRIO PARAHAEMOLYTICUS, ANISAKIS, LISTERIA MONOCYTOGENES, CLOSTRIDIUM BOTULINUM

MEAT: SALMONELLA, LISTERIA MONOCYTOGENES, BACILLUS CEREUS, CLOSTRIDIUM PERFRINGENS, ESCHERICHIA COLI O157:H7, STAPHYLOCOCCUS AUREUS

PORK: CLOSTRIDIUM PERFRINGENS, TRICHINELLA, SALMONELLA, LISTERIA MONOCYTOGENES, BACILLUS CEREUS, STAPHYLOCOCCUS AUREUS

POULTRY: CLOSTRIDIUM PERFRINGENS, STAPHYLOCOCCUS AUREUS, SALMONELLA, CAMPYLOBACTER JEJUNI, ESCHERICHIA COLI O157:H7, LISTERIA MONOCYTOGENES, CLOSTRIDIUM BOTULINUM

PRODUCE: CLOSTRIDIUM PERFRINGENS, BACILLUS CEREUS, LISTERIA MONOCYTOGENES, SHIGELLA SPP., CLOSTRIDIUM BOTULINUM

READY-TO-EAT FOODS: STAPHYLOCOCCUS AUREUS, LISTERIA MONOCYTOGENES, SHIGELLA SPP., SALMONELLA, BACILLUS CEREUS, CLOSTRIDIUM BOTULINUM

SHELLFISH: VIBRIO PARAHAEMOLYTICUS, VIBRIO VULNIFICUS, VIBRIO CHOLERAЕ, YERSINIA SPP., CLOSTRIDIUM BOTULINUM

WATER: CAMPYLOBACTER JEJUNI, SHIGELLA SPP., LISTERIA MONOCYTOGENES, CYCLOSPORA CAYETANENSIS, CRYPTOSPORIDIUM PARVUM, GIARDIA DUODENALIS

EMPLOYEE FECAL/ORAL PATHOGENS: NOROVIRUS, HEPATITIS A, SHIGELLA SPP., SALMONELLA, ESCHERICHIA COLI O157:H7

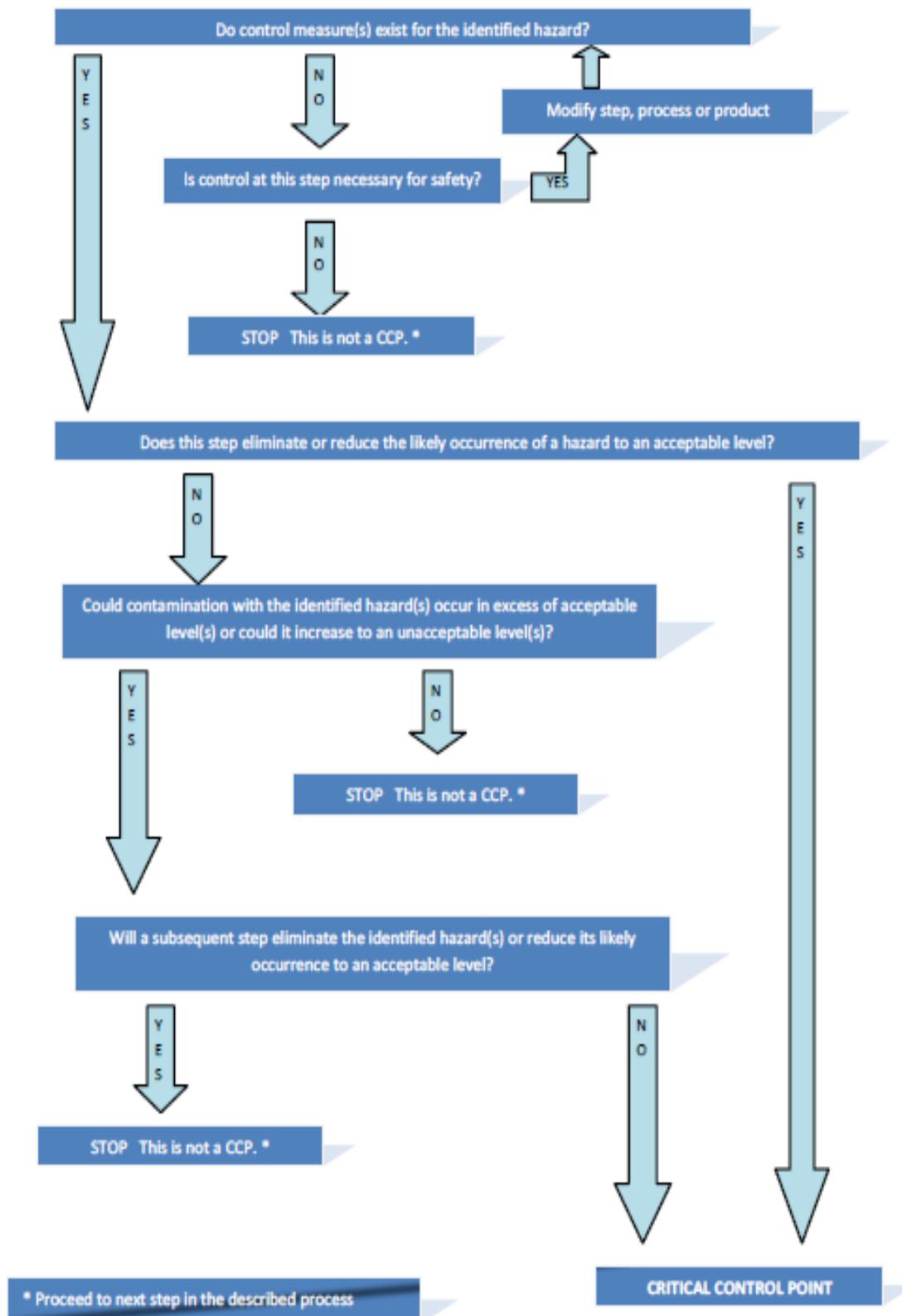
PLEASE SEE THE FOLLOWING LINK TO THE FDA FOR A MORE COMPLETE LIST OF PATHOGENS:

<http://www.fda.gov/Food/FoodSafety/FoodborneIllness/FoodborneIllnessFoodbornePathogensNaturalToxins/BadBugBook/default.htm>

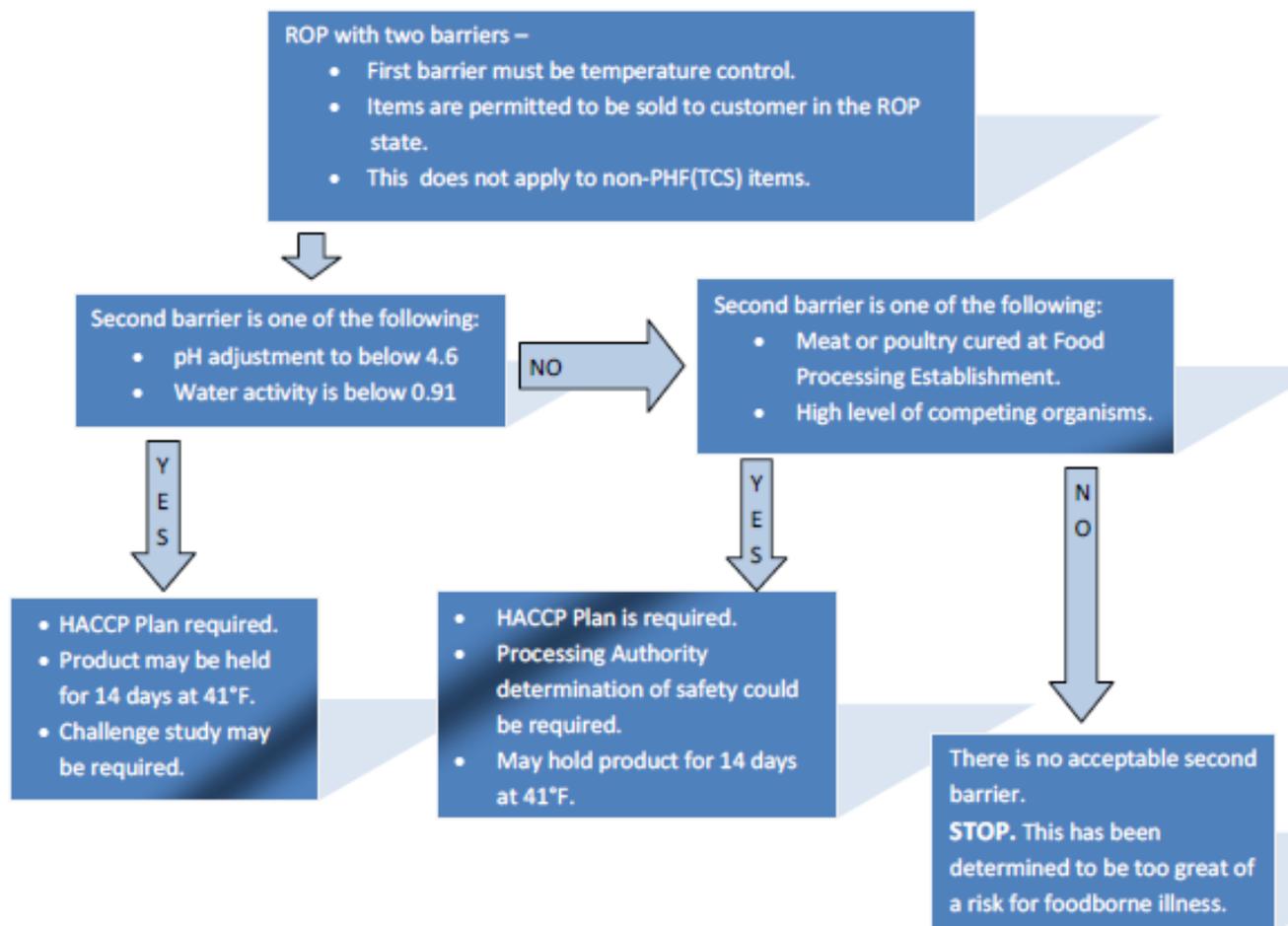
HACCP Guidance Worksheet

Facility Name:		Address:					
Facility ID#:		DATE:			PROCESS: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
Menu Items/Products:							
PROCESS STEP (Check ALL that APPLY)	HAZARD(S)	CCP	CRITICAL LIMITS	MONITORING	CORRECTIVE ACTIONS	VERIFICATION	RECORDS
<input type="checkbox"/> RECEIVE		<input type="checkbox"/> YES / <input type="checkbox"/> NO					
<input type="checkbox"/> STORAGE		<input type="checkbox"/> YES / <input type="checkbox"/> NO					
<input type="checkbox"/> PREPARE		<input type="checkbox"/> YES / <input type="checkbox"/> NO					
<input type="checkbox"/> COOK		<input type="checkbox"/> YES / <input type="checkbox"/> NO					
<input type="checkbox"/> COOL		<input type="checkbox"/> YES / <input type="checkbox"/> NO					
<input type="checkbox"/> REHEAT		<input type="checkbox"/> YES / <input type="checkbox"/> NO					
<input type="checkbox"/> HOLD		<input type="checkbox"/> YES / <input type="checkbox"/> NO					
<input type="checkbox"/> SERVE		<input type="checkbox"/> YES / <input type="checkbox"/> NO					
Prerequisite Programs							

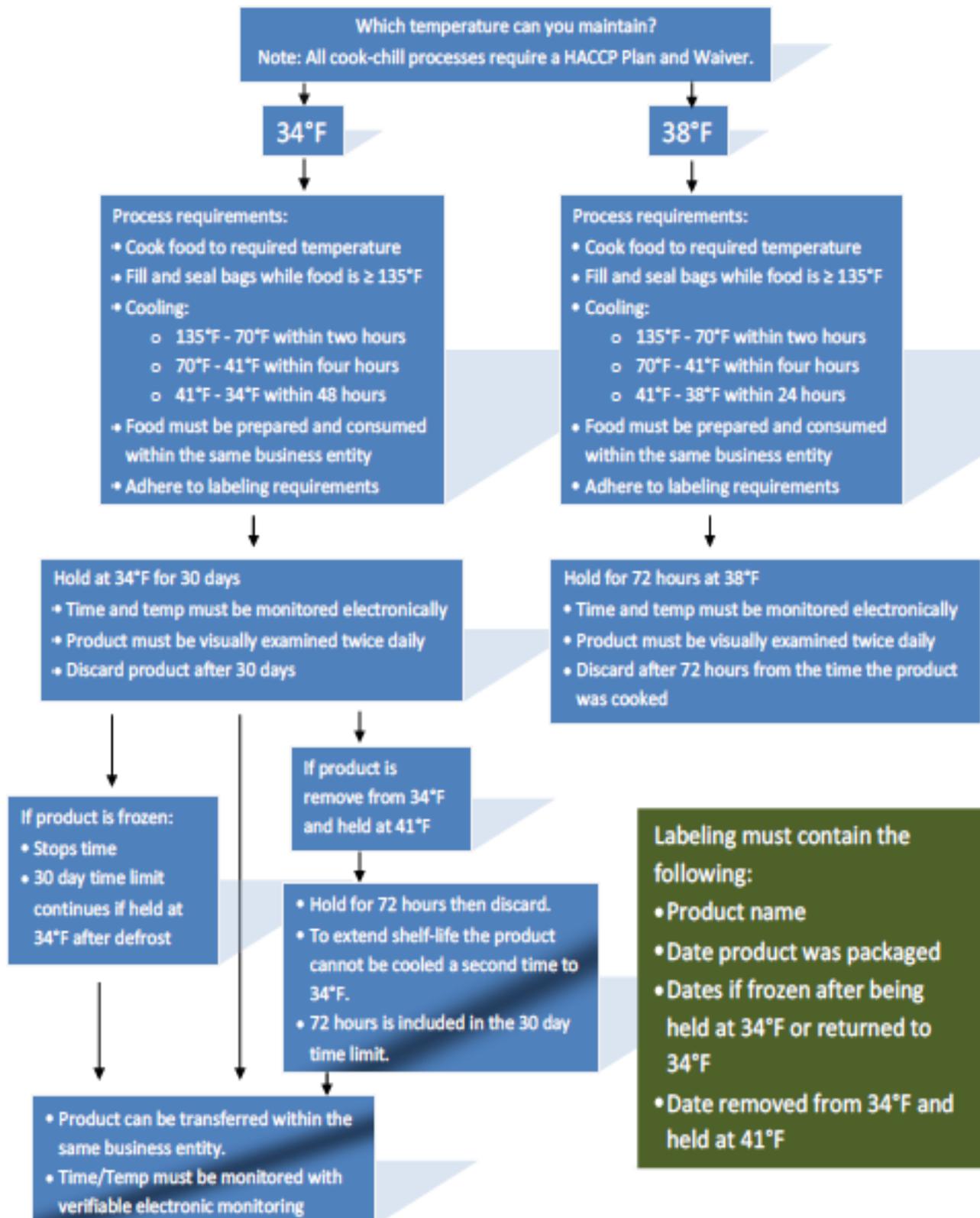
HACCP Decision Tree for CCPs



Reduced Oxygen Packaging (ROP) with Two Barriers



Reduced Oxygen Packaging (ROP) Using the Cook-Chill Method



Sample Standard Operating Procedures (SOPs)

No Bare-Hand Contact (NBHC) with Ready-to-Eat (RTE) Food

Personal Hygiene

Using and Calibrating Thermometers

Proper Hand-Washing

Cleaning and Sanitizing of Food-Contact Surfaces

Controlling Time and Temperature During Preparation

Receiving Deliveries

Preventing Contamination During Storage and Preparation

No Bare Hand Contact with Ready-to-Eat Foods SOP (Sample)

Purpose: To prevent foodborne illness due to hand-to-food cross-contamination.

Scope: This procedure applies to foodservice employees who prepare, handle, or serve food.

Key Words: Ready-to-eat Food (RTE Food), Cross-Contamination

1. Ready-to-Eat Food (RTE Food) means food that: (**Note: Definitions are found in Chapter 1 of the North Carolina Food Code Manual**)

- Is in a form that is edible without additional preparation to achieve food safety, as specified under one of the following: 3-401.11(A) or (B), 3-401.12, or 3-402.11, or as specified in 3-401.11(C), or
- Is a raw or partially cooked animal food and the consumer is advised as specified in Subparagraphs 3-401.11(D)(1) and (3), or
- Is prepared in accordance with a variance that is granted as specified in Subparagraph 3-401.11(D)(4); and
- May receive additional preparation for palatability or aesthetic, epicurean, gastronomic, or culinary purposes

2. Ready-to-Eat Food (RTE Food) includes:

- Raw animal food that is cooked as specified under 3-401.11 or 3-401.12, or frozen as specified under 3-402.11;
- Raw fruits and vegetables that are washed as specified under 3-302.15;
- Fruits and vegetables that are cooked for hot holding, as specified under 3-401.13;
- All Potentially Hazardous Food (Time/Temperature Control for Safety Food) that is cooked to the temperature and time required for the specific food under Subpart 3-401 and cooled as specified under 3-501.14;
- Plant food for which further washing, cooking, or other processing is not required for food safety, and from which rinds, peels, husks, shells, if naturally present are removed;
- Substances derived from plants such as spices, seasonings, and sugar;
- A bakery item such as bread, cakes, pies, fillings, or icing for which further cooking is not required for food safety;
- The following products that are produced in accordance with USDA guideline and that have received a lethality treatment for pathogens: dry, fermented sausages, such as dry salami, or pepperoni, salt-cured meat and poultry products, such as prosciutto ham, country cured ham, and Parma ham, and dried meat and poultry products, such as jerky or beef sticks; and
- Food manufactured as specified in 21 CFR Part 113, Thermally Processed Low-Acid Foods Packaged in Hermetically Sealed Containers.

3. Cross-Contamination means the passing of bacteria, microorganisms, or other harmful substances indirectly from one surface to another through improper or unsanitary equipment, procedures, or products.

INSTRUCTIONS:

1. Train foodservice employees on using the procedures in this SOP.

2. Follow North Carolina Food Code Manual requirements.
3. Use proper hand-washing procedures to wash hands and exposed portions of the arms prior to preparing or handling food, or at any time when the hands may have been contaminated. Refer to “Proper Hand-washing” SOP.
4. Do not use bare hands to handle ready-to-eat foods at any time, unless during the process of washing fruits and vegetables.
5. Use suitable utensils when working with ready-to-eat food. Suitable utensils may include:
 - Single-use gloves
 - Deli tissue
 - Foil wrap
 - Tongs, spoodles, spoons, spatulas, and other dispensing equipment

MONITORING:

A designated foodservice employee, or employees, will visually observe that bare-hand contact of ready-to-eat food is eliminated and that gloves or suitable utensils are used and changed at the appropriate times during all hours of operation.

CORRECTIVE ACTION:

1. Retrain any foodservice employee found not following the procedures in this SOP.
2. Discard any ready-to-eat food touched with the bare hands.

VERIFICATION AND RECORD KEEPING

The foodservice manager will verify that foodservice workers are using suitable utensils by visually monitoring foodservice employees during all hours of operation. The foodservice manager will complete the Food Safety Checklist daily. The designated foodservice employee responsible for monitoring will record any discarded food in the corrective action section of the Food Safety Checklist. The Food Safety Checklist is to be kept on file for a minimum of 1 year.

DATE IMPLEMENTED: _____ **BY:** _____

DATE REVIEWED: _____ **BY:** _____

DATE REVISED: _____ **BY:** _____

PERSONAL HYGIENE SOP (Sample SOP)

PURPOSE: To prevent contamination of food by food handlers

SCOPE: This procedure applies to foodservice employees who handle, prepare, or serve food.

KEY WORDS: Personal Hygiene, Cross-Contamination

1. **Personal Hygiene** means practices associated with the preservation of health and healthy living. Personal hygiene practices include not working with food when sick, washing hands in an approved manner and at required times, using clean gloves and utensils when handling food, keeping fingernails trimmed so hands can be more easily cleaned as required, wearing proper hair restraints as required, and wearing clean clothing or outer garments.

2. **Cross-contamination** means the passing of bacteria, microorganisms, or other harmful substances indirectly from one surface to another through improper or unsanitary equipment, procedures, or products.

INSTRUCTIONS:

1. Train foodservice employees on using the procedures in this SOP.
2. Follow North Carolina Food Code Manual requirements.
3. Follow the Employee Health Policy; report symptoms as required. (**Note: Facility will follow its approved Employee Health Policy**)
4. Report to work in good health, clean, and dressed in appropriate attire.
5. Change outer clothing when soiled.
6. Wash hands properly, frequently, and at the appropriate time. (See Proper Hand-washing SOP)
7. Keep fingernails trimmed, filed, and maintained so that edges are cleanable and not rough.
8. Employees shall not wear artificial nails, or fingernail polish, when handling food.
9. Do not wear any jewelry except for a plain ring, such as a wedding band.
10. Treat and bandage wounds and sores immediately. If wounds or sores cannot be effectively bandaged and protected so not to pose a cross-contamination risk to food and food contact surfaces, employee shall be restricted in their duties to avoid such risk.
11. Cover a lesion containing pus with a bandage. If the lesion is on the hand or wrist, cover with an impermeable cover such as a finger cot or stall and a single-use glove. If the lesion is on other parts of the body, cover with a dry, durable, tight-fitting bandage.

12. Eat, drink, use tobacco, or chew gum on in designated areas where food, food contact surfaces, single-use, or single service articles will not be contaminated.
13. A close beverage container may be used if it is handled and stored to prevent contamination.
14. Food shall be tasted in a sanitary manner:
 - Place a small amount of food into a separate container.
 - Step away from exposed food and food contact surfaces.
 - Use a clean and sanitary utensil to taste food. Remove the used utensil and container to the ware-washing area. Never reuse a utensil that has already been used to taste/sample food.
 - Wash hands immediately.
15. Wear suitable and effective hair restraints while in the kitchen.

MONITORING:

- A designated foodservice employee will inspect employees when they report to work to be sure that each employee is following this SOP.
- The designated foodservice employee will monitor that all foodservice employees are adhering to the personal hygiene policy during all hours of operation.

CORRECTIVE ACTION:

1. Retrain any foodservice employee found not following the procedures in this SOP.
2. Discard any affected food, single-use, or single-service article. Utensils and equipment will be cleaned and sanitized.

VERIFICATION AND RECORD KEEPING:

The foodservice manager will verify that foodservice employees are following this SOP by visually observing that employees during all hours of operation. The foodservice manager will complete the Food Safety Checklist daily. Foodservice employees will record any discarded food on the Damaged or Discarded Product Log. The Food Safety Checklist and Damaged or Discarded Product Logs are to be kept on file for a minimum of 1 year.

DATE IMPLEMENTED: _____ **BY:** _____

DATE REVIEWED: _____ **BY:** _____

DATE REVISED: _____ **BY:** _____

USING AND CALIBRATING THERMOMETERS

(Sample SOP)

PURPOSE: To prevent foodborne illness by ensuring that the appropriate type of thermometer is used to measure internal product temperatures and that thermometers used are correctly calibrated for accuracy.

SCOPE: This procedure applies to foodservice employees who prepare, cook, and cool food.

KEY WORDS: Thermometer, Calibration

1. **Thermometer** means a device designed to measure temperatures.
2. **Calibration** means the act of adjusting, by comparison with a known standard, the accuracy of a measuring instrument.

INSTRUCTIONS:

1. Train foodservice employees on using the procedures in this SOP.
2. Follow the requirements in the North Carolina Food Code Manual.
3. Follow the food thermometer manufacturer's instructions for use. Use a food thermometer that measures temperatures at least within the range of 0°F to 220°F. Digital temperature measuring devices will likely have a broader range. Regardless, the instrument used must be appropriate for the temperature being taken. For example:
 - Temperatures of thin products, such as hamburgers, chicken breasts, pizza filets, nuggets, hot dogs, and sausage patties must be taken with an instrument with a thin probe.
 - Bimetallic, dial-faced stem thermometers are appropriate only when measuring temperatures of thick foods. They may not be used to measure temperatures of thin foods. A dimple mark located on the stem of the thermometer indicates the minimum food thickness that can be accurately measured.
 - Use on oven-safe, bimetallic thermometers when measuring temperatures of food while cooking in an oven.
4. Have food thermometers easily accessible to foodservice employees during all hours of operation.
5. Clean and sanitize food thermometers before each use. It is advisable to move from RTE foods to raw to minimize the chances of cross contamination even when cleaning and sanitizing methods are practiced.
6. Store food thermometers in an area that is clean and where they are not subject to contamination.

MONITORING:

1. Food service employees will use either the ice-point method or boiling-point method to verify the accuracy of food thermometers. This is known as verifying the calibration of the thermometer.
2. To use the ice-point method:
 - Prepare a cup of ice with enough cold water to remove any air pockets.
 - Insert the thermometer probe at least two inches into the ice water making sure not to touch the side or bottom of the cup.

- Allow the temperature reading to stabilize before reading the thermometer.
- Temperature measurement should be 32°F (+/- 2°F). If adjustment is required, follow manufacturer's instructions.

3. To use the boiling-point method:

- Immerse at least the first two inches of the probe into boiling water, making sure not to touch the sides or bottom of the container.
- Allow the temperature reading to stabilize before reading the temperature.
- Reading should be 212°F (+/- 2°F). **Note:** If at higher altitudes, please check with temperature at which water boils with corresponding altitude above sea level. If adjustment is required, follow manufacturer's instructions.

4. Foodservice employees will check the accuracy of the food thermometers:

- At regular intervals (at least daily)
- If dropped (this is true particularly for bimetal stem dial-faced thermometers)
- If used to measure extreme temperatures, such as inside an oven
- Whenever accuracy is in question

CORRECTIVE ACTION:

1. Retrain any foodservice employee found not following the procedures in this SOP.

2. For an inaccurate, bimetallic, dial-faced thermometer, insert the thermometer probe at least two inches into ice water (prepared as stated above) and adjust the temperature by turning the dial while securing the calibration nut (located just under or below the dial) with pliers or a wrench until the thermometer reads 32°F. **Note:** Some brands come with their own calibration tool.

3. For an inaccurate digital thermometer with a reset button, adjust the thermometer according to manufacturer's instructions.

4. If an inaccurate thermometer cannot be adjusted on-site, discontinue use, and follow manufacturer's instructions for having the thermometer calibrated.

5. Retrain employees who are using or calibrating the food thermometers improperly.

VERIFICATION AND RECORD KEEPING:

Foodservice employees will record the calibration temperature of any corrective action taken, if applicable, on the Thermometer Calibration Log each time a thermometer is calibrated. The foodservice manager will verify that foodservice employees are using and calibrating thermometers properly by making visual observations of the employees during the calibration process and all hours of operation. The foodservice manager will review and initial the Thermometer Calibration log weekly. The Calibration Log will be kept on file a minimum of 1 year. The Foodservice Manager will complete the Food Safety Checklist daily. The Food Safety Checklist is to be kept on file for a minimum of 1 year.

DATE IMPLEMENTED: _____

BY: _____

DATE REVIEWED: _____

BY: _____

DATE REVISED: _____

BY: _____

CLEANING AND SANITIZING FOOD CONTACT SURFACES

(Sample SOP)

PURPOSE: To prevent foodborne illness by ensuring that all food contact surfaces are properly cleaned and sanitized.

SCOPE: This procedure applies to foodservice employees involved in cleaning and sanitizing food contact surfaces.

KEY WORDS: Food Contact Surface, Cleaning, Sanitizing, Equipment, Utensil

1. Food Contact Surface means: **Note: Definition can be found in Chapter 1 of the North Carolina Food Code Manual.**

- A surface of equipment or a utensil with which food normally comes into contact; or
- A surface of equipment or a utensil from which food may drain, drip, or splash:
 - Into a food, or
 - Onto a surface normally in contact with food.

2. Sanitizing means:

- The application of cumulative heat or chemicals on cleaned food-contact surfaces that, when evaluated for efficacy, is sufficient to yield a reduction of 5 logs, which is equal to 99.999% reduction, or representative disease microorganisms of public health importance. **Note: See “Sanitization” in Chapter 1 of the North Carolina Food Code Manual.**

3. Equipment means:

- An article that is used in the operation of a food establishment such as a freezer, grinder, hood, ice maker, meat block, mixer, oven, reach-in refrigerator, scale, slicer, range, table, temperature measuring device for ambient air, or ware-washing equipment. **Note: See Chapter 1 of the North Carolina Food Code Manual for definition.**

4. Utensil means:

- A food contact implement or container used in the storage, preparation, transportation, dispensing, sale, or service of food, such as kitchenware, or tableware that is multiuse, single-service, or single-use, gloves used in contact with food, temperature sensing probes of food temperature measuring devices, and probe-type price or identification tags used in contact with food.

INSTRUCTIONS:

1. Train foodservice employees on using the procedures in this SOP.

2. Follow the requirements found in the North Carolina Food Code Manual.

3. Follow manufacturer’s instructions regarding the use and maintenance of equipment and use of chemicals for cleaning and sanitizing food contact surfaces. Refer to Storing and Using Poisonous or Toxic Chemicals SOP.

4. Food contact surfaces of equipment and utensils shall be clean to sight and touch as specified in 4-601.11(A) and (B) in the North Carolina Food Code Manual, and shall be cleaned at a frequency as specified in 4-602.11 and 4-602.12.

5. Methods for cleaning the food-contact surfaces of equipment and utensils shall comply with the methods specified in 4-603.11, 4-603.12, 4-603.13, 4-603.14, 4-603.15, 4-603.16, and 4-603.17 of the North Carolina Food Code Manual.
6. Food-contact surfaces of equipment and utensils shall be sanitized before use after cleaning using methods found in 4-703.11 of the North Carolina Food Code Manual.
7. If a 3-compartment sink is used, set-up and use the sink in the following manner:
 - In the first compartment, wash with a clean detergent solution at or above 110°F or at the temperature specified by the detergent manufacturer.
 - In the second compartment, rinse with clean water.
 - In the third compartment, sanitize with a sanitizing solution mixed at a concentration specified on the manufacturer's label, at a concentration specified in 4-501.114 or the North Carolina Food Code Manual, or by immersing in hot water at or above 171°F for at least 30 seconds. Test the chemical sanitizer level concentration by using an appropriate test kit intended for testing the chemical product.
8. If a ware-washing machine is used
 - Check with the ware-washing machine manufacturer to verify that the information on the data plate is correct.
 - Refer to the information on the data plate for determining wash, rinse, and sanitization (final) rinse temperatures; sanitizing solution concentrations; and water pressure, if applicable.
 - Ensure that the food contact surfaces reach a surface temperature of 160°F or above if using hot water to sanitize.

MONITORING:

Foodservice employees will:

1. During all hours of operation, visually and physically inspect food contact surfaces of equipment and utensils to ensure that the surfaces are clean.
2. In a 3-compartment sink, on a daily basis:
 - Visually monitor that the water in each compartment is clean.
 - Monitor the water temperature in the first compartment of the sink by using a calibrated thermometer.
 - If using chemicals to sanitize in the 3rd compartment, test the sanitizer concentration by using the appropriate test kit for the chemical.
 - If using hot water to sanitize in the 3rd compartment, use a calibrated thermometer to measure the water temperature. Refer to Using and Calibrating Thermometers SOP.
3. In a ware-washing machine, on a daily basis:
 - Visually monitor that the water and interior parts of the machine are clean and free of debris.
 - Continually monitor the temperature and pressure gauges, if applicable, to ensure that the machine is operating according to the data plate.
 - For hot water sanitizing ware-washing machines, ensure that the food contact surfaces are reaching the appropriate temperature by placing a piece of heat sensitive tape on a small-ware item or a maximum registering thermometer on a rack and running the item or rack through the ware-washing machine.

- For chemical sanitizing ware-washing machines, check the sanitizer concentration on a recently washed food-contact surface using an appropriate test kit.

CORRECTIVE ACTION:

1. Retrain any foodservice employee found not following the procedures in this SOP.
2. Wash, rinse, and sanitize unclean food contact surfaces. Sanitize food contact surfaces if it is discovered that the surfaces were not properly sanitized. Discard food that comes in contact with food contact surfaces that have not been sanitized properly.
3. In a 3-compartment sink:
 - Drain and refill compartments periodically and as needed to keep the water clean.
 - Adjust the water temperature by adding hot water until the desired temperature is reached.
 - Add more sanitizer or water, as appropriate, until the proper concentration is achieved.
4. In a ware-washing machine:
 - Drain and refill the machine periodically and as needed to keep the water clean.
 - Contact the appropriate individual(s)/service company to have the machine repaired if the machine is not reaching the proper wash temperature indicated on the data plate.
 - For a hot water sanitizing ware-washing machine, retest by running the machine again. If the appropriate surface temperature is not achieved on the second run, contact the appropriate individual(s)/service company to have the machine serviced/repaired. Wash, rinse, and sanitize in the 3-compartment sink until the machine is repaired or use disposable single-service/single-use items if a 3-compartment sink is not available. **Note: Check with your local regulatory authority to determine if facility must close until repairs are made.**
 - For a chemical sanitizing ware-washing machine, check the level of sanitizer remaining in the bulk container. Fill, or change container, if needed. “Prime” the machine according to the manufacturer’s instructions to ensure that the sanitizer is being pumped through the machine. Retest. If the proper sanitizer concentration level is not achieved, stop using the machine and contact the appropriate individual(s)/service company to have it serviced/repaired. Use a three-compartment sink to wash, rinse, and sanitize until the machine is repaired. **Note: Check with your local regulatory to determine if facility must close until repairs are made.**

VERIFICATION AND RECORD KEEPING

Foodservice employees will record monitoring activities and any corrective action taken on the Food contact Surfaces Cleaning and Sanitizing Log. The foodservice manager will verify that foodservice employees have taken the required temperatures and tested the sanitizer concentration by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating the Food Contact Surfaces Cleaning and Sanitizing Log. The log will be kept on file for at least 1 year. The foodservice manager will complete the Food Safety Checklist daily. The Food Safety checklist is to be kept on file for a minimum of 1 year.

DATE IMPLEMENTED: _____

BY: _____

DATE REVIEWED: _____

BY: _____

DATE REVISED: _____

BY: _____

CONTROLLING TIME AND TEMPERATURE DURING PREPARATION

(Sample SOP)

PURPOSE: To prevent foodborne illness by limiting the amount of time that potentially hazardous foods are held in the temperature danger zone during preparation.

SCOPE: This procedure applies to foodservice employees who prepare food.

KEY WORDS: Cross-contamination, Time and Temperature Control, Food Preparation, Temperature Danger Zone

INSTRUCTIONS:

1. Train foodservice employees on using the procedures in this SOP. Refer to the Using and Calibrating Thermometers SOP.
2. Follow the requirements found in the North Carolina Food Code Manual.
3. Wash hands prior to preparing foods. Refer to the Proper Hand-washing SOP.
4. Use clean and sanitized equipment and utensils while preparing food. Refer to the Cleaning and Sanitizing of Food-Contact Surfaces SOP.
5. Separate raw foods from ready-to-eat (RTE) foods by keeping them in separate containers until ready to use and by using separate dispensing utensils. Refer to the Preventing Cross-Contamination During Storage and Preparation SOP.
6. Pre-chill ingredients for cold foods, such as sandwiches, salads, and cut melons, to 41°F or below before combining with other ingredients.
7. Prepare foods as close to serving times as the menu will allow.
8. Prepare food in small batches.
9. Limit the time for preparation of any batches of food so that ingredients are not at room temperature for more than 30 minutes before cooking, serving, or being returned to the refrigerator.
10. If potentially hazardous foods are not cooked or served immediately after preparation, quickly chill from ambient temperatures down to 41°F or less within 4 hours.

MONITORING:

1. Use a clean, sanitized, and calibrated probe thermometer, preferably a thermocouple.
2. Take at least two internal temperatures from each pan of food at various stages of preparation.
3. Monitor the amount of time that food is in the temperature danger zone. It should not exceed four hours.

CORRECTIVE ACTIONS:

1. Retrain any foodservice employee found not following the procedures in this SOP.
2. Begin the cooking process immediately after preparation is complete for any foods that will be served hot.
3. Rapidly cool ready-to-eat foods or foods that will be cooked at a later time.
4. Immediately return ingredients to the refrigerator if the anticipated preparation completion time is expected to exceed 30 minutes.
5. Discard food held in the temperature danger zone for more than four hours.

VERIFICATION AND RECORD KEEPING:

Foodservice employees will record the date, product name, start and end times of production, the two temperature measurements taken, any corrective actions taken, and the amount of food prepared on the Production Log. The foodservice manager will verify the amount of food prepared on the Production Log. The foodservice manager will verify that foodservice employees are taking the required temperatures and following the proper preparation procedure by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating the Production Log daily. Maintain the Production Log as outlined in the HACCP Plan. The foodservice manager will complete the Food Safety Checklist daily. The Food Safety Checklist is to be kept on file for a minimum of 1 year.

DATE IMPLEMENTED: _____

BY: _____

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RECEIVING DELIVERIES

(Sample SOP)

PURPOSE: To ensure that all food is received fresh and safe and within temperature parameters when it enters the foodservice establishment and to transfer food to proper storage as quickly as possible to prevent temperature abuse.

SCOPE: This procedure applies to foodservice employees who handle, prepare, or serve food.

KEY WORDS: Cross-contamination, Temperatures, Receiving, Holding, Frozen Goods, Delivery

INSTRUCTIONS:

1. Train foodservice employees on using the procedures in this SOP.
2. Follow the requirements found in the North Carolina Food Code Manual.
3. Schedule deliveries to arrive at designated times during operational hours.
4. Post the delivery schedule, including the names of vendors, days and times of deliveries, and drivers' names.
5. Establish a rejection policy to ensure accurate, timely, consistent, and effective refusal and return of the rejected goods.
6. Organize freezer and refrigeration space, loading docks, and storerooms before deliveries.
7. Gather product specification lists and purchase orders, temperature logs, calibrated thermometers, pens, flashlights, and clean loading carts before deliveries. Refer to the Using and Calibrating Thermometers SOP.
8. Keep receiving area clean and well lighted.
9. Do not touch ready-to-eat foods with bare hands.
10. Determine whether foods will be marked with the date-of-arrival or the "use by" date and mark accordingly upon receipt.
11. Compare delivery invoice against products ordered and products delivered.
12. Transfer foods to their appropriate locations as quickly as possible.

MONITORING:

1. Inspect the delivery truck when it arrives to ensure that it is clean, free of putrid odors, and organized to prevent cross-contamination. Be sure refrigerated foods are delivered on a refrigerated truck.
2. Check the interior temperature of refrigerated trucks.

3. Confirm vendor name, day and time of delivery, as well as the driver's identification before accepting delivery. If driver's name is different from what is indicated on the delivery schedule, contact the vendor immediately.
4. Check frozen foods to ensure that they are all frozen solid and show no signs of thawing and refreezing, such as the presence of large ice crystals or liquids on the bottom of cartons.
5. Check the temperature of refrigerated foods:
 - For fresh meat, fish, and poultry products, insert a clean and sanitized thermometer into the center of the product to ensure a temperature of 41°F or below. The temperature of milk should be 45°F or below.
 - For packaged products, insert a food thermometer between two packages being careful not to puncture the wrapper. If the temperature exceeds 41°F, it may be necessary to take the internal temperature before accepting the product.
 - For eggs, the interior temperature of the truck should be 45°F or below.
6. Check dates of milk, eggs, and other perishable goods to ensure safety and quality.
7. Check the integrity of food packaging.
8. Check the cleanliness of crates and other shipping containers before accepting products. Reject foods that are shipped in dirty crates.

CORRECTIVE ACTION:

1. Retrain any foodservice employee found not following the procedures of this SOP.
2. Reject the following:
 - Frozen foods with signs of previous thawing.
 - Cans that have signs of deterioration, such as swollen sides or ends, flawed seals or seams, dents on the seams or deep indentations, or rust.
 - Puncture packages.
 - Foods with out-dated expiration dates.
 - Foods that are out of safe temperature zones or deemed unacceptable by the established rejection policy.

VERIFICATION AND RECORD KEEPING

Record the temperature and the corrective action on the delivery invoice or on the Receiving Log. The foodservice manager will verify that foodservice employees are receiving products using the proper procedure by visually monitoring receiving practices during the shift and reviewing the Receiving Log at the close of each day. Receiving Logs are kept on file for a minimum of 1 year.

DATE IMPLEMENTED: _____ **BY:** _____

DATE REVIEWED: _____ **BY:** _____

DATE REVISED: _____ **BY:** _____

PREVENTING CROSS-CONTAMINATION DURING STORAGE AND PREPARATION (Sample SOP)

PURPOSE: To reduce foodborne illness by preventing unintentional contamination of food.

SCOPE: This procedure applies to anyone who is responsible for receiving, storing, preparing, and serving food.

KEY WORDS: Cross-Contamination, Preparation, Contamination, Storage, Receiving

INSTRUCTIONS:

1. Train foodservice employees on using the procedures in this SOP.
2. Follow the requirements found in the North Carolina Food Code Manual.
3. Wash hands properly. Refer to the Proper Hand-Washing SOP.
4. Avoid touching ready-to-eat (RTE) food with the bare hands. Refer to the No Bare Hand Contact with Ready to Eat Food SOP.
5. Separate raw animal foods, such as eggs, fish, meat, and poultry, from RTE foods, such as lettuce, cut melons, and lunch meats during receiving, storage, and preparation.
6. Separate different types of raw animal foods, such as eggs, fish, meat, and poultry, from each other, except when combined in recipes.
7. Store raw animal foods in refrigerators or walk-in coolers by placing the raw animal foods on shelves in order of cooking temperatures with the raw animal food requiring the highest cooking temperature, such as poultry, on the lowest shelf.
8. Separate unwashed fruits and vegetables from washed fruits and vegetables and other RTE foods.
9. Use only dry, cleaned, and sanitized equipment and utensils. Refer to the Cleaning and Sanitizing of Food Contact Surfaces SOP.
10. Touch only those surfaces of equipment and utensils that will not come in direct contact with food.
11. Place food in covered containers or packages, except during cooling, and store in the walk-in refrigerator or cooler.
12. Designate an upper shelf or a refrigerator or walk-in cooler as the “cooling” shelf, or use a speed rack (typically used in bakeries for cooling baked products). Uncover containers of food during the initial quick cool-down phase to facilitate cooling.
13. Clean the exterior surfaces of food containers, such as cans and jars, of visible soil before opening.
14. Store damaged goods in separate location where they will not pose a risk of cross-contamination to other foods.

MONITORING:

A designated foodservice employee will continually monitor food storage and preparation to ensure that food is not cross-contaminated.

CORRECTIVE ACTION:

1. Retrain any foodservice employee found not following the procedures in this SOP.
2. Separate foods found improperly stored.
3. Discard RTE foods that are contaminated by raw eggs, raw fish, raw meat, or raw poultry.

VERIFICATION AND RECORD KEEPING:

The foodservice manager will visually observe that employees are following these procedures and taking all necessary corrective actions during all hours of operation. The foodservice manager will periodically check the storage of foods during hours of operation and complete the Food Safety Checklist daily. The Food Safety Checklist will be kept on file for a minimum of 1 year. Foodservice employees will document any discarded food as per the facility’s HACCP Plan. The foodservice manager will verify that appropriate corrective actions are being taken by foodservice employees according to the facility’s HACCP Plan.

DATE IMPLEMENTED: _____

BY: _____

DATE REVIEWED: _____

BY: _____

DATE REVISED: _____

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