

GUIDELINES FOR SUBMITTING

A HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP) PLAN

And

WAIVER REQUEST FOR SPECIAL PROCESSES

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Waiver Request Form – Special Processes



GENERAL INFORMATION

Company Name	_SNHD permit number
Contact Name	Contact phone number
Contact email address	
USE OF WAIVER Process waiver requested for Examples: Cook/chill, <i>sous vide</i> , smoking, curing, use of food additi	ves, molluscan shellstock tank, sprouting seeds or beans
Will process be used at more than one location?Yes number(s) for location process used at Use additional sheet if necessary	_No If yes, list name(s) and SNHD permit
Will product be served at more than one restaurant/outlet? number(s) for location product served to the public Use additional sheet if necessary	Yes No If yes, name(s) and SNHD permit

Will the product sold to the public at retail? ____ Yes ____ No

SUPPORT DOCUMENTATION

Documentation	SNHD sample	SNHD sample	Other	Not
	not modified	modified	form	submitted
Recipe(s)/List of ingredients	N/A	N/A		N/A
List of Equipment and Materials	N/A	N/A		N/A
Hazard Worksheet/list of hazards	N/A			N/A
Process Flow Diagram	N/A			N/A
HACCP Worksheet	N/A			N/A
Cooking Potentially Hazardous Foods SOP				
Cooling Potentially Hazardous Foods SOP				
Eliminating Bare Hand Contact SOP				
Handwashing SOP				
Hot and Cold Holding of Potentially Hazardous Foods SOP				
Personal Hygiene SOP				
Time As a Control SOP	N/A			
Using and Calibrating Thermometer SOP				
Cooking and Reheating Log				
Cooling Log				
Refrigeration Log				
Thermometer Calibration Log				
Training Log				
Food Safety Checklist				

List additional documentation on an additional sheet.

Signature_____ Date_____

Policies Regarding HACCP Plans and Waivers

- Once a HACCP plan and/or waiver is approved by the Southern Nevada Health District (SNHD), that plan becomes a condition of the health permit.
- Once the plan is approved, any adjustment or deviation from the approved process will require resubmission of the HACCP plan and/or waiver request, with associated fees, to the SNHD.
- Once the plan is approved, EH staff will verify the plan is being followed as part of the ongoing inspection process. If it is determined that the permit holder has an inability to follow the HACCP plan and/or waiver, approval may be revoked by SNHD and all operations associated with the HACCP plan and/or waiver will be cease and desisted. After deficiencies have been corrected, the permit holder may apply for another HACCP plan and/or waiver.
- A supervisory conference may be required if regulatory staff determines that the HACCP plan is not adequately followed or if recurring deficiencies are observed. If deficiencies persist the case shall be forwarded to the EH manager for consideration of continued approval or revocation of the HACCP plan/waiver and cease and desist of the process.
- Records must be maintained for a minimum of one year and be available upon request from SNHD staff during routine inspections or any other time the request is made by the Healthy Authority.
- A copy of the HACCP plan and/or waiver must be maintained on site and be conveniently located, such that it is available for review by SNHD staff during routine inspections or any other time the request is made by the Health Authority.
- If the requested HACCP plan and/or waiver is not approved, and adjustments to the plan cannot be made to the plan to garner an approval, an appeal by the requestor may be submitted to the Director of the Environmental Health Division of SNHD for reconsideration of the plan. Should the plan be subsequently rejected by the Director, the requestor maintains its ability to file, with attendant fees, a variance with the Board of Health of the Southern Nevada Health District.

I have read and understand the policies regarding HACCP plans and waivers.



WAIVER means a written agreement between the health authority and a permit holder that authorizes a modification of one or more requirements of these regulations, if in the opinion of the health authority, a health hazard or nuisance will not result from the modification. supporting documents of a waiver may include but is not limited to, operational plans, HACCP plans, scientific challenge studies, monitoring logs, validation studies from certified processing authorities, and labeling. (SNHD Regulation 1-202 [Definitions])

When a waiver is required:

- \rightarrow Smoking as a method of food preservation (not solely for flavor enhancement) (Regulation 3-502.11(A))
- \rightarrow Curing (SNHD Regulation 3-502.11(B))
- \rightarrow Use of food additives for food preservation (not solely for flavor enhancement) (Regulation 3-502.11(C))
- \rightarrow Use of a reduced oxygen packaging (ROP) method with only one barrier
 - Cook-chill operations (Regulation 3-502.13(A))
 - Sous vide cooking (Regulation 3-502.13(A))
 - Cheese that is ROP (Regulation 3-502.13(B))
 - Fish that is ROP (Regulation 3-502.13(C))
- → Use of a molluscan shellstock life-support system tank to store or display shellstock offered for human consumption (Regulation 3-502.11(E))
- \rightarrow Custom processing animals for personal/private use as food (Regulation 3-502.11(F))
- \rightarrow Sprouting of seeds or beans (Regulation 3-502.11(H))
- → Use of wiping cloths with an alternative operational procedure (Regulation 3-304.14) (HACCP plan not required)
- → Customer self-service of shellstock and seafood tanks (Regulation 9-304.12(E)) (HACCP plan not required)
- → Operating a Temporary Food Establishment within 50' from any non-sewered toilets and/or animal pens (Regulation 15-304.20) (HACCP plan not required)
- \rightarrow Preparing food by another method that is determined by the Health Authority to require a waiver (Regulation 3-502.11(G)) (HACCP plan may be required)
- → Possibly when operating an uncategorized food establishment (Regulation 4-103.11) (HACCP plan may be required)

Facility currently utilizing the methods above shall submit the required waiver request within 2 years of the implementation of the 2010 Regulations, except cook-chill operations and *sous vide* cooking must be submitted within 6 months.

HAZARD ANALYSIS AND CRITICAL CONTROL POINT (HACCP) PLAN means a written document that delineates the formal procedures for following the HACCP principles developed by the *National Advisory Committee on Microbiological Criteria for Food*. (SNHD Regulation 1-202 [Definitions])

When a HACCP Plan is required: (Regulation 4-101.14)

- \rightarrow In conjunction with a waiver (see above)
- \rightarrow Use of a reduced oxygen packaging (ROP) method with two barriers (Regulation 3-502.12)
 - Time & Temperature Control
 - 41°F or below for no more than 14 calendar days
 - \circ $\,$ Water activity of 0.91 or less
 - \circ pH of 4.6 or below

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- Meat or poultry cured at a USDA regulated facility
- High level of competing organisms (raw meat, poultry or vegetables)
- → Unpackaged juice for highly susceptible population that is prepared on the premises for service or sale in a ready-to-eat form (SNHD Regulation 3-801.11(A)(3))
- \rightarrow Possibly when operating an uncategorized food establishment (Regulation 4-103.11)

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 in preparing any food handled in special process.
- b. *Food service system* Specify the food preparation and service system you will use, i.e. smoking, curing, cook-chill, sous vide, 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, i.e. for ROP the equipment used to bag the food and the type of bags that are filled.
- d. A list of all facilities, including location and permit 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 the same, 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 done, 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 continuing through service of 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. These 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 it is sufficient.

d. Be aware that not all hazards can be controlled at CCPs. Some of the identified hazards will need to be addressed through Standard Operating Procedures (SOPs). Samples of these are provided.

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 can be listed by grouping, i.e. vegetative bacteria, viruses, spore-forming bacteria.
- 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, a SOP will be needed to address employee hygiene and handwashing. 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, i.e. 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 the monitoring, i.e. line cook will take temperature using a calibrated thermometer when food has finished cooking to ensure critical limit has been reached.
 - iii. List the corrective action that should be taken if the critical limit is not reached and who is responsible to ensure the corrective action is followed, i.e. the chicken should be returned to cooking to reach internal temperature of 165°F for 15 seconds.

- iv. List who is responsible to verify that the plan has been followed, i.e. chef will review records to ensure that 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, i.e. temperature logs with corrective action logs are to be maintained.

E. Other Supporting Documentation

- a. Submit blanks of all log sheets, i.e. cooling logs, temperature logs.
- b. Submit all SOPs, i.e. Handwashing SOP, Calibration of Thermometers SOP.
- c. Submit a plan for training of employees 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, this documentation should be submitted at the same time that the HACCP Plan is submitted.
- e. All support documentation must be submitted at the same time as the HACCP Plan is submitted.



<u>Hazards</u>

Vegetative Bacteria:

Spore- Forming / Toxin- Producing Bacteria:

Fecal / Oral Route Hazards:

Viruses:

Parasites:

<u>Chemical Hazards:</u> Naturally Occurring Chemical Toxins:

Additives, etc.

			HACCP Work	sheet		
PROCESS #		RESTAURANT	NAME:			
MENU ITEMS:						
HAZARDS:	CRITICAL CONTROL POINTS (LIST ONLY THE OPERATIONAL STEPS THAT ARE CCP'S)	CRITICAL LIMITS	MONITORING	CORRECTIVE ACTIONS	VERIFICATION	RECORDS
•						
-						
			PREREQUISITE PR	OGRAMS:		

Sample HACCP Plan

A. Priority Assessment Information

- a. Food involved in the Special Process
 - i. Potato Soup ingredients: potatoes, bacon, butter, flour, milk, onions, cheddar cheese, sour cream, salt, pepper
- b. Food Service System Soup will be prepared and packaged using the Cook-Chill Method in Reduced Oxygen Packaging (ROP). It will then be held for up to 30 days at 34°F.
- c. Equipment and Materials Walk in refrigerator, for holding and cooling; Tilt kettle, for cooking; Food vacuum sealer, for bagging soup; Vacuum bags that have an Oxygen Transmission Rate(OTR) of less than 10,000 cc $O_2/m^2/24$ hrs, for bagging and holding soup.
- d. Jean Paul's Bistro, 9999 Las Vegas Blvd, Las Vegas, NV 89000 Permit Number XXXXX XXX-XX

B. Process Flow Diagram - sample

- a. Receiving
 - i. Bacon, Butter, milk, cheddar cheese, sour cream upon receipt verify temperature is below 41°F and package still maintains its integrity, then transfer to cooler with a temperature below 41°F and hold till needed
 - **ii.** Flour, salt, pepper verify package still maintains its integrity and then transfer to dry storage
 - iii. Potatoes, onions verify wholesomeness and package integrity and transfer to dry storage or refrigeration whichever is appropriate
- b. Cooking
 - i. In tilt kettle cook bacon until crispy remove and set aside. In same tilt kettle create roux using butter, flour, and milk. Add diced potatoes and onions bring to a boil and continue cooking until potatoes are soft
 - ii. Simmer 10 minutes; mix in bacon, cheese, sour cream, salt and pepper.Continue cooking until cheese is melted. Cooking logs will be maintained.CCP1
- c. Bagging
 - i. While soup is still hot >135°F, put soup in bags and seal using the food vacuum sealer. Temperature logs will be maintained. **CCP2**
- d. Bags will be labeled with the product name and the date they are packaged
- e. Cooling -
 - Soup will be cooled in the bags from 135°F to 70°F in 2 hours and from 70°F to 41°F in 4 hours for a total of 6 hours.
 - ii. Soup will then be cooled from 41°F to 34°F within 48 hours. Cooling logs will be maintained. **CCP3**
- f. Holding soup will be held for a maximum of 30 days. Electronic monitoring of refrigeration temperatures and time will be monitored. Visual inspection of product will be conducted at least two times each day. Inspection logs will be maintained.
- g. Reheat
 - i. Bags of soup will be placed in boiling water for reheat.
 - Reheat temperature of 165°F will be verified before food is transferred to hot holding equipment. Temperature logs will be maintained. CCP4
- h. Hot holding
 - i. Soup will be hot held in the steam table at 135°F until ordered.



<u>Hazards</u>

Vegetative Bacteria: LISTERIA MONOCYTOGENES CAMPYLOBACTER JEJUNI YERSINIA ENTEROCOLITICA SALMONELLA

<u>Spore-Forming / Toxin- Producing Bacteria:</u> BACILLUS CEREUS CLOSTRIDIUM PERFRINGENS STAPHYLOCOCCUS AUREUS CLOSTRIDIUM BOTULINUM

<u>Fecal / Oral Route Hazards:</u> ESCHERICHIA COLI O157:H7 SHIGELLA SPP

<u>Viruses:</u> NOROVIRUS HEPATITIS A

<u>Parasites:</u> TRICHINELLA

<u>Chemical Hazards:</u> Naturally Occurring Chemical Toxins:

Additives, etc.

HACCP Worksheet

PROCESS #	Reduced	Oxygen Pac	kaging
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RESTAURANT NAME: Jean Paul's Bistro

MENU ITEMS:			Ро	tato Soup		
HAZARDS:	CRITICAL CONTROL POINTS (LIST ONLY THE OPERATIONAL STEPS THAT ARE CCP'S)	CRITICAL LIMITS	MONITORING	CORRECTIVE ACTIONS MANAGER APPROVAL NEEDED BEFORE ADJUSTMENT TO PROCESS CAN BE MADE	VERIFICATION	RECORDS
VEGETATIVE BACTERIA	CCP1 COOKING	155°F for 15 sec	SOUS CHEF WILL CHECK COOK TEMP WITH ALL BATCHES	CONTINUE HEATING TO 155° - CORRECTIVE ACTION RECORDED	MANAGER REVIEWS TEMPS AND PROCEEDURES ON A DAILY BASIS	CORRECTIVE ACTION AND TEMP LOGS MAINTAINED FOR 1 YEAR
SPORE-FORMING / TOXIN-PRODUCING BACTERIA	CCP2 - BAGGING	≥ 135°F MUST BE MAINTAINED WHILE BAGGING	SOUS CHEF WILL CHECK FILLING TEMP TO ENSURE APPROPRIATE FILLING TEMP	IF TEMP FALLS BELOW 135°F, FOOD WILL BE REHEATED TO 165°F FOR 15 SECONDS - CORRECTIVE ACTION RECORDED	MANAGER REVIEWS TEMPS AND PROCEEDURES ON A DAILY BASIS	CORRECTIVE ACTION AND TEMP LOGS MAINTAINED FOR 1 YEAR
FECAL / ORAL ROUTE	CCP3 - COOLING	135°-70°F IN 2 HRS / 70°-41°F IN 4 HRS / 41°F-34°F IN 48 HRS	CHECK TEMPS EVERY HOUR AND RECORD TEMP ON COOLING LOG	REHEAT TO 165°F IF TIMES ARE NOT MET - CORRECTIVE ACTION RECORDED	MANAGER REVIEWS TEMPS AND PROCEEDURES ON A DAILY BASIS	CORRECTIVE ACTIONS TAKEN AND COOLING LOGS MAINTAINED FOR 1 YEAR
VIRUSES / PARASITES	CCP4 - REHEATING	165°F for 15 sec	COOK WILL CHECK REHEATING TEMP WITH ALL BATCHES AND RECORD TEMP ON COOKING AND REHEATING LOG	CONTINUE HEATING TO 165° - CORRECTIVE ACTION RECORDED	MANAGER REVIEWS TEMPS AND PROCEEDURES ON A DAILY BASIS	CORRECTIVE ACTIONS TAKEN AND REHEATING LOGS MAINTAINED FOR 1 YEAR
			PREREQUISITE PRO	GRAMS:		
1. SOP - THERMON 2. SOP - HANDWAS	IETER CALIBRATION SHING, EMPLOYEE HEALTH, BARE	HAND CONTACT				

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 0157: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, BACILLIUS CEREUS, CLOSTRIDIUM BOTULINUM

SHELLFISH: VIBRIO PARAHAEMOLYTICUS, VIBRIO VULNIFICUS, VIBRIO CHOLERAE, 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/FoodbornellIness/FoodbornellInessFoodbornePathogensNaturalToxins/BadBugBook /default.htm

HACCP Decision Tree for CCPs



Reduced Oxygen Packaging (ROP) with Two Barriers



- First barrier must be temperature control.
- Items are permitted to be sold to customer in the ROP state.
- This does not apply to non-PHF(TCS) items.

NO

Second barrier is one of the following:

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Water activity is below 0.91



- HACCP Plan required.
- Product may be held for 14 days at 41°F.
- Challenge study may be required.

- HACCP Plan is required. • Processing Authority •
- determination of safety could be required.
- May hold product for 14 days at 41°F.

There is no acceptable second barrier. **STOP.** This has been determined to be too great of a risk for foodborne illness.

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Second barrier is one of the following:

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Meat or poultry cured at Food

High level of competing organisms.

Processing Establishment.

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



Sample Standard Operating Procedures (SOP)

Eliminating Bare Hand Contact Holding Hot and Cold Potentially Hazardous Foods Personal Hygiene Calibrating Thermometers Time Alone as a Public Health Control Washing Hands Cooking and Reheating Potentially Hazardous Foods

Additional Sample Standard Operating Procedures can be found at:

http://sop.nfsmi.org/HACCPBasedSOPs.php

STANDARD OPERATING PROCEDURE (SOP) FOR ELIMINATING BARE HAND CONTACT WHEN HANDLING READY-TO-EAT FOODS

(Sample SOP)

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, Cross-Contamination

- 1. READY-TO-EAT FOOD means food that:
 - Is in a form that is edible without additional preparation to achieve food safety or a raw or partially cooked animal food and the customer is advised of the hazard.
 - Ready-to-Eat Food includes but is not limited to:
 - Raw animal FOOD that is cooked as required in Cooking and Reheating SOP
 - Raw fruits and vegetables which are thoroughly washed to remove soil and other contaminants.
 - Fruits and vegetables which are cooked and held for hot holding, as required in Cooking and Reheating SOP
 - All potentially hazardous food that is cooked required in Cooking and Reheating SOP, and cooled as required in Cooling SOP.
 - Plant food for which further washing, cooking, or other processing is not required for food safety, and from which rinds, peels, husks, or shells, if naturally present are removed.
 - Substances derived from plants including but not limited to spices, seasonings, and sugar, that will not be cooked.
 - A bakery item including but not limited to bread, cakes, pies, fillings, or icing for which further cooking is not required for food safety.
 - Commercially processed food for which further cooking is not required for food safety.
- 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 Southern Nevada Health District regulations.
- 3. Use proper handwashing procedures to wash hands and exposed arms prior to preparing or handling food or at anytime when the hands may have become contaminated. See Washing Hands SOP.
- 4. Do not use bare hands to handle ready-to-eat foods at any time unless 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(s) will visually observe that bare hand contact of ready-toeat-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 ready-to-eat food touched with 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:	ВҮ:
DATE REVISED:	BY:

STANDARD OPERATING PROCEDURE (SOP) FOR HOLDING HOT AND COLD POTENTIALLY HAZARDOUS FOODS (PHFs)

(Sample SOP)

PURPOSE: To prevent foodborne illness by ensuring that all potentially hazardous foods are held under the proper temperature.

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

KEY WORDS: Cross-Contamination, Temperature, Hot Holding, Cold Holding,

- 1. 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.
- 2. TEMPERATURE means the amount of heat or cold measured on a thermometer. This SOP measures temperature in degrees Fahrenheit (°F).
- 3. COLD HOLDING means storing a food product in equipment designed to keep it cold.
- 4. HOT HOLDING means storing a food product in equipment designed to keep it hot.

INSTRUCTIONS:

- 1. Train foodservice employees on using the procedures in this SOP. Refer to the Using and Calibrating Thermometers SOP.
- 2. Follow Southern Nevada Health District regulations.
- 3. Hold hot foods at 135 °F or above.
 - a. Preheat steam tables and hot boxes.
- 4. Hold cold foods at 41 °F or below.

MONITORING:

- 1. Use a clean, sanitized, and calibrated probe thermometer to measure the temperature of the food.
- 2. If using a dial thermometer, make sure the thermometer in inserted into the product past the mark on the probe. If unable to do so due to product size, use a digital thermometer or thermocouple.
- 3. Take temperatures of foods by inserting the thermometer near the surface of the product, at the thickest part, and at other various locations.
- 4. Take temperatures of holding units by placing a calibrated thermometer in the coolest part of a hot holding unit or warmest part of a cold holding unit.
- 5. For hot foods held for service:
 - Verify that the air/water temperature of any unit is at 135 °F or above before use.
 - Reheat foods in accordance with the Reheating for Hot Holding SOP.
 - All hot potentially hazardous foods should be 135 °F or above before placing in holding units.
 - Take the internal temperature of food before placing it on a steam table or in a hot holding unit and at least every 2 hours thereafter.
- 6. For cold foods held for service:
 - Verify that the air/water temperature of any unit is at 41 °F or below before use.

- Chill foods, if applicable, in accordance with the Cooling Potentially Hazardous Foods SOP.
- All cold potentially hazardous foods should be 41 °F or below before placing the food in holding units.
- Take the internal temperature of the food before placing it onto any salad bar, display cooler, or cold serving line and at least every 2 hours thereafter.
- 7. For cold foods in storage:
 - Take the internal temperature of the food before placing it into any walk-in cooler or reach-in cold holding unit.
 - Chill food in accordance with the Cooling Potentially Hazardous Foods SOP if the food is not 41 °F or below.
 - Verify that the air temperature of any cold holding unit is at 41 °F or below before use and at least every 4 hours thereafter during all hours of operation.

CORRECTIVE ACTION:

- 1. Retrain any foodservice employee found not following the procedures in this SOP.
- 2. For hot foods:
 - Reheat the food to 165 °F for 15 seconds if the temperature is found to be below 135 °F and the last temperature measurement was 135 °F or higher and taken within the last 2 hours.
 - Repair or reset holding equipment before returning the food to the unit, if applicable.
 - Discard the food if it cannot be determined how long the food temperature was below 135 °F.
- 3. For cold foods:
 - Rapidly chill the food using an appropriate cooling method if the temperature is found to be above 41 °F and the last temperature measurement was 41 °F or below and taken within the last 2 hours:
 - •Place food in shallow containers (no more than 4 inches deep) and uncovered on the top shelf in the back of the walk-in cooler.
 - •Use a quick-chill unit like a blast chiller.
 - •Stir the food in a container placed in an ice water bath.
 - •Add ice as an ingredient.
 - •Separate food into smaller or thinner portions.
 - Repair or reset holding equipment before returning the food to the unit, if applicable.
 - Discard the food if it cannot be determined how long the food temperature was above 41 °F.

VERIFICATION AND RECORD KEEPING:

Foodservice employees will record temperatures of food items and document corrective actions taken on the Hot and Cold Holding Temperature Log. A designated foodservice employee will record air temperatures of coolers and cold holding units on the Refrigeration Logs. The foodservice manager will verify that foodservice employees have taken the required holding temperatures by visually monitoring foodservice employees during the shift and reviewing the temperature logs at the close of each day. The temperature logs are to be kept on file for a minimum of 1 year.

DATE IMPLEMENTED: ______BY: _____BY: ____BY: _____BY: ____BY: ____BY: _____BY: ____BY: _____BY: _____BY: _____BY: _____BY: _____BY: _____BY: _____BY: _____BY: _____BY: ____BY: _____BY: _____BY: ____BY: ____BY: _____BY: ____BY: ___BY: ___BY: ____BY: ____BY: ____BY: ____BY: ___BY: __BY: ___BY: __BY: ___BY: ___BY: ___BY: __BY: ___BY: ___BY: ___BY: __BY: __BY:

DATE REVIEWED	BY:	
DATE REVISED:	BY:	

STANDARD OPERATING PROCEDURE (SOP) FOR PERSONAL HYGIENE (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 the right way and at the right time, using clean gloves and utensils when handling food, keeping fingernails trimmed so hands can be easily cleaned as required, wearing proper hair restraints as required, 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 Southern Nevada Health District (SNHD) regulations.
- 3. Follow the Employee Health Policy; report symptoms as required. (Employee health policy is not included in this resource, see 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 times. (See hand washing SOP.)
- 7. Keep fingernails trimmed, filed, and maintained so that the edges are cleanable and not rough.
- 8. Do not wear artificial fingernails or fingernail polish when working with exposed good unless wearing gloves.
- 9. Do not wear any jewelry except for a plain ring such as a wedding band.
- 10. Treat and bandage wounds and sores immediately. When hands are bandaged, single-use gloves must be worn.
- 11. Cover a lesion containing pus with a bandage. If the lesion is on a 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 if the body, cover with a dry, durable, tight-fitting bandage.
- 12. Eat, drink, use tobacco, or chew gum only in designated areas where food or food contact surfaces may not become contaminated.
- 13. A closed beverage container may be used if it is handled to prevent contamination.
- 14. Taste food the correct way:
 - Place a small amount of food into a separate container.
 - Step away from exposed food and food contact surfaces.
 - Use a teaspoon to taste the food. Remove the used teaspoon and container to the dish room. Never reuse a spoon that has already been used for tasting.
 - Wash hands immediately.

15. Wear suitable and effective hair restraints while in the kitchen.

Personal Hygiene, continued

(Sample SOP)

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 affected food.

VERIFICATION AND RECORD KEEPING:

The foodservice manager will verify that foodservice employees are following this SOP by visually observing the 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 Southern Nevada Health District regulations.
- 3. Follow the food thermometer manufacturer's instructions for use. Use a food thermometer that measures temperatures from 0 °F (-18 °C) to 220 °F (104 °C) and is 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 using a thermistor or thermocouple with a thin probe.
 - Bimetallic, dial-faced stem thermometers are accurate 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 only 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 thermometer before each use. (Wiping cloth with approved sanitizer or alcohol swab approved to sanitize thermometer probe.)
- 6. Store food thermometers in an area that is clean and where they are not subject to contamination.

MONITORING:

- 1. Foodservice 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 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 sides or bottom of the cup.
 - Allow the temperature reading to stabilize before reading the temperature.
 - Temperature measurement should be 32 °F (± 2 °F) [or 0 °C (± 1 °C)]. If adjustment is required, follow manufacturer's instructions.

- 3. To use boiling-point method:
 - Immerse at least the first two inches of the probe into boiling water making sure not to touch sides or bottom of container.
 - Allow the temperature reading to stabilize before reading the temperature.
 - Reading should be 212 °F ([±] 2 °F) [or 100 °C ([±] 1 °C)]. If adjustment is required, follow manufacturer's instructions.
- 4. Foodservice employees will check the accuracy of the food thermometers:
 - At regular intervals (at least once per week)
 - If dropped
 - If used to measure extreme temperatures, such as in 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.
- 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 using it, and follow manufacturer's instructions for having the thermometer calibrated.
- 5. Retrain employees who are using or calibrating food thermometers improperly.

VERIFICATION AND RECORD KEEPING:

Foodservice employees will record the calibration temperature and 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 operating hours. 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:

STANDARD OPERATING PROCEDURE (SOP) FOR USING TIME ALONE AS A PUBLIC HEALTH CONTROL TO LIMIT BACTERIAL GROWTH IN POTENTIALLY HAZARDOUS FOODS (Sample SOP)

PURPOSE: To prevent foodborne illness by ensuring that potentially hazardous foods are not held in the temperature danger zone for more than 4 hours before being cooked or served.

SCOPE: This procedure applies to foodservice employees that handle, prepare, cook, and serve food.

KEY WORDS: Temperature, Time As a Public Health Control

- 1. TEMPERATURE means the amount of heat or cold measured on a thermometer. This SOP measured temperature in degrees Fahrenheit (°F).
- 2. TIME AS A PUBLIC HEALTH CONTROL means using time only (and not temperature which is usually used in conjunction with time) to control bacterial growth in potentially hazardous foods and ensure safe food products. Food is removed from temperature control for short periods of time (less than four hours) and used correctly, time can be an effective control because there will be no significant bacterial growth or toxin production possible in such a limited time. However, if time is not closely monitored, foodborne illness may result.

INSTRUCTIONS:

- 1. Train foodservice employees on using the procedures in this SOP. Refer to the Using and Calibrating Thermometers SOP.
- 2. Follow Southern Nevada Health District regulations.
- 3. Except during preparation, cooking, or cooling, or when time is used as the means of public health control, potentially hazardous foods shall be maintained at 135 °F or above, or at 41 °F or below.
- 4. Establish written procedures that clearly identify:
 - Specific foods for which time rather than temperature will be used as a public health control to limit bacteria growth.
 - Food shall have an internal temperature of 41 °F or below or 135 °F or above when removed from temperature control.
 - Marking procedures used to indicate the time that is 4 hours past the point when the food is removed from temperature control, such as an oven or refrigerator.
 - Procedures to ensure that food that is prepared, cooked and refrigerated before time is used as a public health control are cooled properly. Refer to the Cooling Potentially Hazardous Foods SOP.
 - Procedures that are followed when food is in the danger zone for greater than 4 hours.
 - Cook raw potentially hazardous food within 4 hours past the point when the food is removed from temperature control.
 - Serve or discard cooked or ready-to-eat food within 4 hours past the time when the food is removed from temperature control.
 - Once time is used as a public health control, it cannot be returned to hot or cold holding.

- Avoid mixing different batches of food together in the same container. If different batches of food are mixed together in the same container, use the time associated with the first batch of food as the time by which to cook, serve, or discard all the food in the container.
- 5. Keep these written procedures in the food establishment and make available to the Southern Nevada Health District upon request.

MONITORING:

- 1. Foodservice employees will continually monitor that foods are properly marked or identified with the time that is 4 hours past the point when the food is removed from temperature control.
- 2. Foodservice employees will continually monitor that foods are cooked, served, or discarded by the indicated time.

CORRECTIVE ACTION:

- 1. Retrain any foodservice employee found not following the procedures in this SOP.
- 2. Discard unmarked or unidentified food removed from temperature control.
- 3. Discard food that is noted to exceed the 4-hour limit.

VERIFICATION AND RECORD KEEPING:

Foodservice employees will mark or otherwise identify food as specified in the Instructions Section of this SOP. The foodservice manager will verify that foodservice employees are following this procedure by visually monitoring foodservice employees and food handling during the shift. 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:

STANDARD OPERATING PROCEDURE (SOP) FOR WASHING HANDS

(Sample SOP)

PURPOSE: To prevent foodborne illness by contaminated hands.

SCOPE: This procedure applies to anyone who handles, prepares, and serves food.

KEY WORDS: Handwashing, Cross-Contamination

- 1. HANDWASHING means the act of cleansing the hands with warm water and soap, for the purpose of removing soil and microorganisms.
- 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 Southern Nevada Health District regulations.
- 3. Use designated handwashing sinks for handwashing only. Do not use food preparation, utility, and dishwashing sinks for handwashing.
- 4. Provide:
 - Warm (at least 100 °F) running water
 - Self-closing, slow closing or metered faucets shall provide a flow of water for at least 15 seconds.
 - Liquid soap in a fixed dispenser
 - Disposable towels
 - Waste container conveniently located near the handwashing sink or near the door in restrooms.
- 5. Keep handwashing sinks accessible anytime employees are present.
- 6. Wash hands:
 - Before starting work
 - After touching hair, face, or body
 - After using the toilet room
 - After sneezing, coughing, or using a handkerchief or tissue
 - After smoking, eating, drinking, or chewing gum or tobacco
 - After touching dirty dishes, equipment, or utensils
 - During food preparation as often as necessary to remove soil and contamination
 - After handling raw meats, poultry, or fish
 - When moving from one food preparation area to another
 - Before putting on or changing gloves
 - After removing gloves when working with raw animal products
 - After any clean up activity such as sweeping, mopping, or wiping counters
 - After handling trash
 - After handling money
 - After any time the hands may become contaminated
- 7. Follow proper handwashing procedures as indicated below:
 - Wet hands and forearms with warm, running water at least 110 °F and apply soap.

- Scrub lathered hands and forearms, under fingernails, and between fingers for at least 15 seconds.
- Rinse thoroughly under warm running water.
- Dry hands and forearms thoroughly with single-use paper towels.
- Turn off water using paper towels.
- Use paper towel to open door when exiting the restroom.
- 8. Follow FDA recommendations when using hand sanitizers. These recommendations are as follows:
 - Use hand sanitizers only after hands have been properly washed and dried.
 - Use only hand sanitizers that comply with the Southern Nevada Health District's regulations for food establishments. Confirm with the manufacturers that the hand sanitizers used meet these requirements.
 - Use hand sanitizers in the manner specified by the manufacturer.

MONITORING:

- 1. A designated employee will visually observe the handwashing practices of the foodservice staff during all hours of operation.
- 2. The designated employee will visually observe that handwashing sinks are properly supplied during all hours of operation.

CORRECTIVE ACTION:

- 1. Retrain any foodservice employee found not following the procedures in this SOP.
- 2. Ask employees that are observed not washing their hands at the appropriate times or using the proper procedure to wash their hands immediately.
- 3. Retrain employee to ensure proper handwashing procedure.

VERIFICATION AND RECORD KEEPING:

The foodservice manager will complete the Food Safety Checklist daily to indicate that monitoring is being conducted as specified. 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:

STANDARD OPERATING PROCEDURE (SOP) FOR COOKING & REHEATING POTENTIALLY HAZARDOUS FOODS

(Sample SOP)

PURPOSE: To prevent foodborne illness by ensuring that all foods are cooked to the appropriate internal temperature.

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

KEY WORDS: Cross-Contamination, Temperatures, Cook

- 1. 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.
- 2. COOK means to transform food and make it suitable for consumption by heating.
- 3. TEMPERATURE means the amount of heat or cold measured on a thermometer. This SOP measures temperature in degrees Fahrenheit (°F).

INSTRUCTIONS:

- 1. Train foodservice employees on using the procedures in this SOP. Refer to the Using and Calibrating Thermometers SOP.
- 2. Follow Southern Nevada Health District (SNHD) Regulations.
- 3. If a recipe contains a combination of meat products, cook the product to the highest required temperature.
- 4. Cook or reheat products to the following temperatures:
 - a. 145 °F for 15 seconds
 - Fish, seafood, beef, pork and commercially raised game animals
 - Eggs cooked to order that are placed onto a plate and immediately served
 - b. 155 °F for 15 seconds
 - Ground products containing beef, pork, or fish
 - Beef or pork that has been mechanically tenderized or injected
 - Cubed or Salisbury steaks
 - Fish nuggets or sticks
 - Eggs cooked and hot held for service (such as a steam table or hot box)
 - c. 165 °F for 15 seconds
 - Poultry
 - Stuffed fish, pork, or beef
 - Pasta stuffed with eggs, fish, pork, or beef (such as lasagna or manicotti)
 - Food cooked in a microwave
 - Food previously cooked and cooled at this facility that is reheated for hot holding
 - d. 135 °F for 15 seconds
 - Food commercially processed that will be stored in hot holding
 - Fresh, frozen, or canned fruits and vegetables that will be stored in hot holding.
 - e. 130 °F for 112 minutes (or equivalent according to roast cooking chart)

• Whole beef roasts, corned beef roasts, pork roasts and cured pork roasts (including ham)

MONITORING:

- 1. Use a clean, sanitized, and calibrated probe thermometer, preferably a thermocouple.
- 2. Avoid inserting the thermometer into pockets of fat or near bones when taking internal cooking temperatures.
- 3. If using a dial thermometer, make sure the thermometer in inserted into the product past the mark on the probe. If unable to do so due to product size, use a digital thermometer or thermocouple.
- 4. Take at least two internal temperatures from each batch of food by inserting the thermometer into the thickest part of the product, which usually is in the center.
- 5. Take at least two internal temperatures of each large food item, such as a turkey, to ensure that all parts of the product reach the required cooking temperature.

CORRECTIVE ACTION:

- 1. Retrain any foodservice employee found not following the procedures in this SOP.
- 2. Continue cooking food until the internal temperature reaches the required temperature.

VERIFICATION AND RECORD KEEPING:

Foodservice employees will record product name, time, the two temperatures/times, and any corrective action taken on the Cooking and Reheating Temperature Log.

Foodservice manager will verify that foodservice employees have taken the required cooking temperatures by visually monitoring foodservice employees and preparation procedures during the shift and reviewing, initialing, and dating the temperature log at the close of each day. The Cooking and Reheating Temperature Log is to be kept on file for a minimum of 1 year.

DATE IMPLEMENTED:	_BY:
DATE REVIEWED:	BY:
DATE REVISED:	_BY:

STANDARD OPERATING PROCEDURE (SOP) FOR COOLING POTENTIALLY HAZARDOUS FOODS

(Sample SOP)

PURPOSE: To prevent foodborne illness by ensuring that all potentially hazardous foods are cooled properly.

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

KEY WORDS: Cross-Contamination, Temperature, Cooling

- 1. 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.
- 2. TEMPERATURE means the amount of heat or cold measured on a thermometer. This SOP measures temperature in degrees Fahrenheit (°F).
- 3. COOLING means decreasing the temperatures

INSTRUCTIONS:

- 1. Train foodservice employees on using the procedures in this SOP. Refer to the Using and Calibrating Thermometers SOP.
- 2. Follow Southern Nevada Health District Regulations.
- 3. Modify menus, production schedules, and staff work hours to allow for implementation of proper cooling procedures.
- 4. Prepare and cool food in small batches when practical.
- 5. Chill food rapidly using an appropriate cooling method:
 - Place food in shallow containers no more than 4 inches deep and uncovered on the top shelf in the back of the walk-in cooler.
 - Separate food into smaller or thinner portions.
 - Use a quick-chill unit such as a blast chiller.
 - Stir the food in a container placed in an ice water bath. Make sure the level of ice water is at least as high as the product.
 - Use containers that facilitate heat transfer (avoid using plastic containers).
 - Add ice as an ingredient.
 - Pre-chill ingredients and containers used for making bulk items such as salads.
- 6. Chill cooked, hot food from:
 - 135 °F to 70 °F within 2 hours. Take corrective action immediately if food is not chilled from 135 °F to 70 °F within 2 hours.
 - 70 °F to 41 °F or below within 4 hours. (The total cooling process from 135 °F to 41 °F may not exceed 6 hours.) Take corrective action immediately if food is not chilled from 135 °F to 41 °F within the 6 hour cooling process.
- 7. Chill potentially hazardous foods prepared with ambient temperature ingredients (that will be cooked before being served) from 70 °F to 41 °F or below within 4 hours. Take corrective action immediately if ready-to-eat food is not chilled from 70 °F to 41 °F within 4 hours.
- 8. Potentially hazardous foods that are ready to eat must be prepared from chilled ingredients.

MONITORING:

- 1. Use a clean, sanitized, and calibrated probe thermometer to measure the internal temperature of the food during the cooling process.
- 2. Document the final cook temperature of the product then monitor temperatures of products every hour throughout the cooling process by inserting a probe thermometer into the center of the food and at various locations in the product.

CORRECTIVE ACTION:

- 1. Retrain any foodservice employee found not following the procedures in this SOP.
- 2. Reheat cooked, hot food to 165 °F for 15 seconds and start the cooling process again using a different cooling method when the food is:
 - Above 70 °F and 2 hours or less into the cooling process; and
 - Above 41 °F and 6 hours or less into the cooling process.
- 3. Discard cooked, hot food immediately when the food is:
 - Above 70 °F and more than 2 hours into the cooling process; or
 - Above 41 °F and more than 6 hours into the cooling process.
- 4. Use a different cooling method for prepared potentially hazardous foods when the food is above 41 °F and less than 4 hours into the cooling process.
- 5. Discard prepared potentially hazardous foods when the food is above 41 °F and more than 4 hours into the cooling process.

VERIFICATION AND RECORD KEEPING:

Foodservice employees will record temperatures and corrective actions taken on the Cooling Temperature Log. Foodservice employees will record if there are no foods cooled on any working day by indicating "No Foods Cooled" on the Cooling Temperature Log. The foodservice manager will verify that foodservice employees are cooling food properly by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating the temperature log each working day. The Cooling Temperature Logs are to be kept on file for a minimum of 1 year.

DATE IMPLEMENTED:	BY:	
DATE REVIEWED:	BY:	
DATE REVISED:	BY:	

Logs

Cooling Log

HACCP Employee Training Log

Refrigeration Log

Thermometer Calibration Log

Cooking and Reheating Temperature Log

Additional Logs available at:

http://sop.nfsmi.org/HACCPBasedSOPs.php

Cooling Temperature Log

Instructions: Record final cook temperature and temperatures every hour during the cooling cycle. Mark "yes" or "no" if cooling parameters met. Record corrective actions, if applicable on bottom of log. If no foods are cooled on any working day, indicate "No Foods Cooled" in the Food Item column.

Verification: The foodservice manager will verify that the foodservice staff is cooling food properly by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating this log daily. Maintain this log for a minimum of 1 year.

Date	Food Item	Time/ Cook Temp	Time/	Time/ Temp	Time/ Temp	Time/ Temp	Time/ Temp	Time/ Temp	135°F to-70°F in 2 hours?	70°F to- 41°F in 4 hours?	Corrective Actions Taken? *if yes	Initials	Verified By/ Date
1/1/10	Example: Beef Stew	2:30p 177°	3:40p 138°	4:30p 112°	5:20p 64°	6:20p 49°	7:00p 37°		yes	yes	No	Ab	Cd 1/1/10

*Document date, food item and corrective action taken:

Empl	oyee HAC	CP Plan Food Safety Training Record			
HACCP Pr	oduct or l	Process:			
Res	staurant/O	utlet:			
Directions: Use this form to record food safe	ety training pr	rovided to employees. Maintain this record for a mi	nimum of 1 ye	ear.	
Employee Name	Date	Training Topics	Length of Training	Employee Initial	Trainer Initial

Refrigeration Log

Instructions: A designated foodservice employee will record the location or description of holding unit, date, time, air temperature, corrective action, and initials on this log. The foodservice manager will verify that foodservice employees have taken the required temperatures by visually monitoring food employees during the shift and reviewing, initialing, and dating this log daily. Maintain this log for a minimum of 1 year.

Location/ Unit Description	Date	Time	Air Temp. (°F)	Corrective Action	Food Worker Initials	Manager Initials/ Date

Thermometer Calibration Log

Instructions: Foodservice employees will record the calibration temperature and corrective action taken, if applicable, on the Thermometer Calibration Log each a time thermometer is calibrated. The foodservice manager will verify that foodservice employees are using and calibrating thermometers properly by making visual observations of employee activities during all hours of operation. The foodservice manager will review and initial the log daily. Maintain this log for a minimum of 1 year.

Date	Thermometer Being Calibrated	Temperature Reading (°F)	Corrective Action	Initials	Manager Initials/Date
Example 1/4/2010	John Doe's dial thermometer	32		ſD	Aa, 1 8 2010

Cooking and Reheating Temperature Log

Instructions: Record product name, time, the two temperatures/times, and any corrective action taken on this form. The foodservice manager will verify that foodservice employees have taken the required cooking temperatures by visually monitoring foodservice employees and preparation procedures during the shift and reviewing, initialing, and dating this log daily. Maintain this log for a minimum of 1 year.

Date	Food Item	Location	Internal Temp/ Time	Corrective Action	Initials	Verified By/ Date

Food Regulations Concerning Special Processes

3-502 Specialized Processing Methods

3-502.11 WAIVER Requirements

A FOOD ESTABLISHMENT shall obtain a WAIVER from the HEALTH AUTHORITY as specified in Chapter 4-101.13 of these Regulations prior to:

- (A) Smoking FOOD as a method of FOOD preservation rather than as a method of flavor enhancement.
- (B) Curing FOOD.
- (C) Using FOOD ADDITIVEs or adding components:
 - (1) As a method of FOOD preservation rather than as a method of flavor enhancement.
 - (2) To render a FOOD so that it is not PHF (TCS).
 - (3) Except the addition of vinegar to Sushi Rice as specified in the guidance document provided in Appendix D.
- (D) Packaging FOOD using a REDUCED OXYGEN PACKAGING method, except where the growth of and toxin formation by *Clostridium botulinum* and the growth of *Listeria monocytogenes are controlled* as specified in Section 3-502.12 of this Chapter.
- (E) Operating a MOLLUSCAN SHELLSTOCK life-support system display tank used to store or display SHELLSTOCK that are offered for human consumption.
- (F) Custom processing animals that are for PERSONal use as FOOD and not for sale or service in a FOOD ESTABLISHMENT.
- (G) Preparing FOOD by another method that is determined by the HEALTH AUTHORITY to require a WAIVER.
- (H) Sprouting of seeds or beans.
- (I) Existing facilities currently utilizing any method as specified in A-I of this Section shall submit the required WAIVER, HACCP PLAN, all supporting information and pay applicable fees to the HEALTH AUTHORITY within two years of approval of these Regulations.

3-502.12 REDUCED OXYGEN PACKAGING Without a WAIVER Criteria

Except for a FOOD ESTABLISHMENT, that obtains a WAIVER as specified in Section 3-502.11 of this Chapter, a FOOD ESTABLISHMENT that packages PHF (TCS) using a REDUCED OXYGEN PACKAGING method shall control the growth and toxin formation of *Clostridium botulinum* and the growth of *Listeria monocytogenes*, by;

- (A) A FOOD ESTABLISHMENT that packages PHF (TCS) using a REDUCED OXYGEN PACKAGING method shall have a HACCP PLAN that contains the information specified in Chapter 4-101.14 and Chapter
 - 4-101.15 of these Regulations and that:
 - (1) Identifies the FOOD to be PACKAGED.
 - (2) The PACKAGED FOOD shall be maintained at 41°F±2° or below and shall meet at least one of the following criteria:
 - (a) Has an A_w of 0.91 or less.
 - (b) Has a pH of 4.6 or below.
 - (c) Is a MEAT or POULTRY product, 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 in an intact package.
 - (d) Is a FOOD with a high level of competing organisms including but not limited to raw MEAT or raw POULTRY or raw vegetables.
 - (3) Describes how the package shall be prominently and conspicuously labeled on the principal display panel in bold type, on a contrasting background, with instructions to:
 - (a) Maintain the FOOD at $41^{\circ}F\pm2^{\circ}$ or below.
 - (b) Discard the FOOD if within 14 calendar days of its packaging if it is not served for onpremise consumption, or consumed if served or sold for off-PREMISES consumption.
 - (4) Limits the refrigerated shelf life to no more than 14 calendar days, from packaging to consumption, except the time the product is maintained frozen or the original manufacturer's "sell-by" or "use by" date, whichever occurs first.
 - (5) Includes operational procedures that:

- (a) Prohibit bare hand contact with FOOD.
- (b) Identify a designated work area and the method by which:
 - (i) Physical barriers or methods of separation of raw FOOD and READY-TO-EAT FOOD minimize CROSS-CONTAMINATION.
 - (ii) Access to the processing EQUIPMENT is limited to responsible trained PERSONnel familiar with the potential HAZARDs of the operation.
 - (c) Delineate cleaning and SANITIZATION procedures for FOOD-CONTACT SURFACES.
- (6) Describes the training program that ensures that the individual responsible for the REDUCED OXYGEN PACKAGING operation understands the:
 - (a) Concepts required for safe operations.
 - (b) EQUIPMENT and facilities.
 - (c) Procedures as specified in Paragraph (A) (5) of this Section and Chapter 4-101.15 (D) of these Regulations.
- (B) Existing facilities currently utilizing any method as specified in Paragraph A of this Section shall submit the required HACCP PLAN, all supporting information, and pay applicable fees to the REGULATORY AUTHORITY within two years of approval of these regulations.

3-502.13 REDUCED OXYGEN PACKAGING Requiring a WAIVER

A FOOD ESTABLISHMENT, shall obtain a WAIVER as specified in Section 3-502.11 of this Chapter, if the FOOD ESTABLISHMENT packages PHF (TCS) using a REDUCED OXYGEN PACKAGING method listed below;

- (A) FOOD ESTABLISHMENTS that package FOOD using a cook-chill or *sous vide* process shall obtain a WAIVER provided:
 - (1) The FOOD ESTABLISHMENT implements a HACCP PLAN that contains the information as specified in Chapter 4-101.14 of these Regulations.
 - (2) The FOOD is:
 - (a) Prepared and consumed on the PREMISES, or prepared and consumed off the PREMISES, within the same business entity with no distribution or sale of the bagged product to another business entity or to the CONSUMER.
 - (b) Cooked to heat all parts of the FOOD to a temperature and for a time as specified in Paragraph 3-401.11 of this Chapter.
 - (c) Protected from CONTAMINATION after cooking as specified Section 3-3 of this Chapter.
 - (d) Placed in a package or bag with an oxygen barrier before cooking, or placed in a package or bag immediately after cooking, and before temperature drops below 135°F±2°. A guidance document is provided in Appendix L.
 - (e) Cooled to 41°F±2° in the package or bag as specified in Paragraph 3-501.14 of this Chapter, and subsequently:

(i) Cooled to $34^{\circ}F\pm2^{\circ}$ or below within 48 hours of reaching $41^{\circ}F\pm2^{\circ}$, and held at $34^{\circ}F\pm2^{\circ}$ and consumed or discarded within 30 days after the date of preparation and packaging;

- (ii) If removed from a storage unit that maintains a 34°F±2° FOOD temperature, held at 41°F±2° or below for no more than 72 hours before consumption;
- (iii) Cooled to 38°F±2° or less within 24 hours of reaching 41°F±2° and held there for no more than 72 hours from packaging, at which time the FOOD must be consumed or discarded; or
- (iv) Held frozen with no shelf life RESTRICTion while frozen until consumed or used.
- (f) Held in a refrigeration unit that is equipped with an electronic system that continuously monitors time and temperature, and is visually examined for proper operation twice daily.
- (g) Ensure that required times and temperatures are met and monitored during transportation if the product is transported off-site to a satellite location of the same business entity, and equipped with verifiable electronic monitoring devices.
- (h) Labeled with the product name and the date PACKAGED.

- (3) The records to confirm that cooling and cold holding refrigeration time/temperature parameters are as required by the HACCP PLAN, and that these records are maintained and made available to the HEALTH AUTHORITY upon request and held for six months.
- (4) Written operational procedures as specified in Paragraph (B) (5) of this Section, and a training program as specified in Paragraph (B) (6) of this Section.
- (B) A FOOD ESTABLISHMENT that packages cheese using a REDUCED OXYGEN PACKAGING method shall obtain a WAIVER if it:
 - (1) Limits the cheeses PACKAGED to those that are commercially manufactured in a FOOD PROCESSING ESTABLISHMENT with no ingredients added in the FOOD ESTABLISHMENT and that meet 21 CFR 133.15 Standards of Identity Hard Cheeses, CFR 133.169 Standards of Identity Pasteurized Process Cheese, or CFR 133.187 Standards of Identity Semi-Soft Cheeses.
 - (2) Has a HACCP PLAN that contains the information specified in Chapter 4-101.15 (D) of these Regulations.
 - (3) Identifies the FOOD to be PACKAGED.
 - (4) Describes how the package shall be prominently and conspicuously labeled on the principal display panel in bold type, on a contrasting background, with instructions to:
 - (a) Maintain the FOOD at $41^{\circ}F\pm2^{\circ}$ or below
 - (5) Includes operational procedures that:
 - (a) Prohibit bare hand contact with FOOD.
 - (b) Identify a designated work area and the method by which:
 - (i) Physical barriers or methods of separation of raw FOOD and READY-TO-EAT FOOD minimize CROSS-CONTAMINATION.
 - (ii) Access to the processing EQUIPMENT is limited to responsible trained PERSONnel familiar with the potential HAZARDs of the operation.
 - (c) Delineate cleaning and SANITIZATION procedures for FOOD-CONTACT SURFACES.
 - (6) Describes the training program that ensures that the individual responsible for the REDUCED OXYGEN PACKAGING operation understands the:
 - (a) Concepts required for safe operations.
 - (b) EQUIPMENT and facilities.
 - (c) Procedures as specified in Paragraph (A) (5) of this Section and Chapter 4-101.15 (D) of these Regulations.
 - (7) Labels the package on the principal display panel with a "sell by" or "use by" date, whichever occurs first.
 - (8) Discards the reduced oxygen PACKAGED cheese if it is not sold for off-PREMISES consumption or consumed within 30 calendar days of its packaging.
- (C) A FOOD ESTABLISHMENT that packages FISH using a REDUCED OXYGEN PACKAGING method shall:
 - (1) Implement a HACCP PLAN that contains the information as specified in Chapter 4-101.14 of these Regulations.
 - (2) Provide written validation of the HACCP PLAN and process from a Processing Authority which utilizes the *National Advisory Committee on Microbiological Criteria for Foods* (*NACMCF*) protocols for inoculation studies for *Clostridium botulinum and Listeria monocytogenes*.
 - (3) Shall be maintained frozen until thawed and prepared for consumption. Once thawed shall be held at 41°F±2° or below for no more than 72 hours before consumption or product shall be discarded.
 - (4) Except that FISH that is frozen before, during and after REDUCED OXYGEN PACKAGING shall require submission of a HACCP PLAN for review and approval by the HEALTH AUTHORITY, but shall not require a WAIVER.

(D) Existing facilities currently utilizing any method as specified in Paragraph (A) of this Chapter shall submit the required WAIVER, all supporting information, and pay applicable fees to the REGULATORY AUTHORITY within six months of approval of these regulations.

Food Regulations Concerning HACCP Plans

4-101.15 Contents of HACCP PLAN

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

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