

MANAGEMENT

AMC-HACCP MANAGEMENT

FOOD SAFETY POLICY

We shall operate observing the following Food Safety Policies and Procedures.

Food Safety Policy

It is the policy of this company / establishment to produce wholesome food that is safe for human consumption.

In order to achieve this operating standard, we will be guided by the U.S. Code of Federal Regulations, Good Manufacturing Practices, Standard Operating Procedures, Food and Drug Administration's Food Code, our local state and city rules, and this Hazard Analysis Critical Control-Based, Food Safety Policy, Procedures, and Standards Manual.

All persons will follow a four-step HACCP-TQM (Total Quality Management) cycle. This means that when performing tasks, all people will first learn the hazards and valid food safety controls (critical control points).

1. They will **PLAN** the food production operation, and how it can be done safely.
2. They will **ORGANIZE** and learn to do each production step and any related tasks correctly.
3. They will **OPERATE**, doing tasks according to the procedures and standards of this manual, and will immediately check that they have met necessary standards at each production step. If a person does not know how to do a task in the production of food safely, he or she will stop, ask, and then be taught to do it correctly by designated supervisory personnel.
4. Employees will **MONITOR** their work. In case of a mistake, employees will take any necessary action immediately to assure the production of safe food products. Employees will stop and report potentially hazardous food handling practices, potentially hazardous conditions, or potentially hazardous foods to the supervisor, immediately.

CONTROL OF DOCUMENTS

All records associated with food safety and quality systems must be kept on file for at least two years.

MANAGEMENT RESPONSIBILITY AND COMMITMENT

1. Understand the hygienic requirements for the area under their responsibility, and set a good example.
2. Be responsible for assuring that employees are trained for job mastery and shall continually coach employees to comply with company policies, procedures, and standards.
3. Conduct regularly scheduled inspections and/or systematic audits to ensure that food production area and equipment is cleaned, sanitized, and maintained (**System Capability Monthly Audit**, Encl. B13 in the *QA, QC, AND HACCP TEAM* section)
4. Act on recommendations of the HACCP Team and take corrective action when necessary.
5. Inform visitors that they must comply with the same rules and procedures as for employees. Visitors must also be

instructed not to handle equipment, work-in-progress or finished products.

Food safety management plan. We will have an effective food safety management plan – specifically, this document. It will be the basis for internal and external communications of our policies, procedures, and standards. It will guide our corrective actions and continuous quality improvement. The objective is to control the processes and products of our operation.

Evaluation of unit performance; management review. All employees will be constantly on the alert for processes that are not in control. The HACCP team will evaluate performance when it has its meeting. Members of the HACCP team and QA will do _____ performance evaluations and provide results to the HACCP team. Yearly, there will be a total reassessment of our food safety management system.

Food safety improvement program. We will maintain an effective yearly training program with regular training sessions to each level of employees. We will ensure that all new employees undergo thorough training in the food safety policies, procedures, and standards of the facility before they are allowed to handle food.

Supervisor / Person In Charge (PIC)

There must be a supervisor (PIC) on duty at all times. The supervisor is responsible for making sure that food is received, stored, prepared, and served safely. Make sure there is a supervisor on duty whenever the facility is open.

Holding subordinates responsible. Performing tasks to prepare food safely is a learned behavior. If a person is not trainable, he or she should be released. Never accept excuses such as, "**I forgot.**"

PRODUCT COMPLAINTS

Product complaints are an important indicator of possible deficiencies of manufacturing controls and the distribution handling procedures. The following system will be used for handling and investigating complaints in which:

1. The **Employee-Customer Report of Quality or Hazard Problem and Disposition** form (Encl. A1) will be used.
2. The person responsible for receiving, evaluating, categorizing and/or investigating complaints is identified.
3. Complaints will be accurately categorized according to risks. Potentially serious complaints will be forwarded immediately to the appropriate personnel for action.
4. Safety-related complaints will be investigated by appropriately trained technical personnel.
5. Examination of the complainant's specimen, retail product or other product of the same code will be conducted on safety-related complaints.
6. The depth of the investigation will be appropriate to the risk and similar complaint trends.
7. Appropriate corrective action will be taken for deviations identified during the investigation.
8. Records of complaints and corrective action will be kept on file.

FOODBORNE ILLNESS COMPLAINTS AND HOAXES

When customers say they became ill after eating our product:

1. Complete the **Foodborne Illness Information Form**, Encl. A2. Encl. A3 is an **Analysis of an Alleged Foodborne Illness**. Encl. A4 is an information table about onset times and systems.
2. Call your health department (_____)
3. Ask the customer to call the health department also.

Below are ten findings that might flag a complaint as a hoax.

Note, however, not every complaint is a hoax.

1. Diarrhea or fever within a short (6 hours or less) incubation period. This can happen in 30 minutes to 2 hours because of a food intolerance / allergy, whereby the digestive system cannot digest some component of the recipe such as lactose, a lot of fat, or gluten, and it flushes the bowel.
2. Statements like "I took one bite, and it made me sick" or "Every time I eat here, I get sick."
3. A wide range of symptoms in multiple persons or confusion about the first symptoms (some had onset of fever, but some did not; some had onset of diarrhea and no vomiting, while others had vomiting but no diarrhea)
4. A wide range of incubation periods in multiple victims (some 15 minutes, others 12 hours).
5. Lack of common food items eaten (some had hamburger and some had chicken).
6. Claims that food "tasted bad" (rare in outbreaks).
7. Unusual symptoms.
8. Only non-potentially hazardous foods eaten (donuts and coffee).
9. Threats to call the health department or newspaper unless a free meal or refund, etc. is provided.
10. Claims that the "place looked dirty" or other negative statements about the business not related to the incident.

What to do:

1. Be professional and concerned; be a good listener; do not admit anything.
2. Get the names, addresses, and phone numbers for everyone who claims to be ill.
3. Get a complete and accurate food history for each complainant, what they ate, the day and time, how much they ate.
4. Verify that no other unrelated reports are being received (if other persons unrelated to the initial complaint are calling in, call the health department).
5. Interview everyone who claims to be ill. Document the incubation period (time between consumption and onset of first symptom) for all victims.
6. Get symptoms for all complainants.

FOOD SECURITY

Management

1. Prepares for the possibility of tampering or other malicious, criminal, or terrorist actions.
 - a. Responsibility for security is assigned to the HACCP team.
 - b. The following is our security management strategy to prepare for and respond to tampering and other malicious, criminal, or terrorist actions, both threats and actual events, including identifying, segregating and securing affected product.

- 1) We will use our emergency evacuation, including preventing security breaches during evacuation
- 2) Our alternate offsite to store security plans is _____
- 3) We will keep a current copy of the community emergency response plan.
- 4) The following is our 24-hour contact information for local, state, and federal police / fire / rescue / health / homeland security agencies.

- 5) Our management people whom staff should alert about potential security problems (24-hour contacts) are shown on the organization chart.
- 6) We will promote food security awareness to encourage all staff to be alert to any signs of tampering or other malicious, criminal, or terrorist actions or areas that may be vulnerable to such actions, and reporting any findings to identified management (for example, providing training, instituting a system of rewards, building security into job performance standards)
- 7) We will have a place on the bulletin board where we can keep all people informed about relevant security issues.
- 8) We will have a strategy for communicating with the public (for example, identifying a media spokesperson, preparing generic press statements and background information, and coordinating press statements with appropriate authorities).
2. Oversight / supervision. During the monthly HACCP-TQM audit, we will conduct routine security checks of the premises, including food production, utilities and critical computer data systems (at a frequency appropriate to the operation) for signs of tampering or malicious, criminal, or terrorist actions or areas that may be vulnerable to such actions.
3. Investigation of suspicious activity.
 - a. Management or the HACCP team will be responsible for investigating threats or information about signs of tampering or other malicious, criminal, or terrorist actions.
 - b. We will alert appropriate law enforcement and public health authorities about any threats of or suspected tampering or other malicious, criminal, or terrorist actions.
4. Evaluation program.
 - a. The HACCP team will evaluate the lessons learned from past tampering or other malicious, criminal, or terrorist actions and threats.
 - b. We will review and verify annually the effectiveness of the security management program (for example, using knowledgeable in-house or third party staff to conduct tampering or other malicious, criminal, or terrorist action exercises and mock recalls and to challenge computer security systems), revising the

program accordingly, and keeping this information confidential.

- c. We will perform random food security inspections of all appropriate areas of the facility (including receiving and warehousing, where applicable) using our HACCP team or third party staff, and keeping this information confidential.

Human element – staff

1. Screening (pre-hiring, at hiring, post-hiring). We will examine the background of all staff (including seasonal, temporary, contract, and volunteer staff, whether hired directly or through a recruitment firm) as appropriate to their position, considering candidates' access to sensitive areas of the facility and the degree to which they will be supervised and other relevant factors (for example, obtaining and verifying work references, addresses, and phone numbers, participating in one of the pilot programs managed by the Immigration and Naturalization Service and the Social Security Administration Note: screening procedures should be applied equally to all staff, regardless of race, national origin, religion, and citizenship or immigration status).
2. Daily work assignments. The supervisor will know who is and who should be on premises, and where they should be located, for each shift.
3. Restricted access.
 - a. We will identify staff that requires unlimited access to all areas of the facility.
 - b. We will reassess levels of access for all staff periodically.
 - c. We will limit access so staff enter only those areas necessary for their job functions and only during appropriate work hours.
 - d. We will change combinations, rekeying locks and/or collect keys when a staff member who is in possession of these is no longer associated with the establishment.
4. Personal items.
 - a. We will restrict the type of personal items allowed in establishment to only those personal-use medicines that are necessary for the health of staff and ensuring that these personal use medicines are properly labeled and stored away from food handling or storage areas.
 - b. We will not allow staff to bring personal items (for example, lunch containers, purses) into food handling or storage areas.
 - c. We will do occasional checks of staff lockers.
5. Training in food security procedures.
 - a. Food security awareness, including information on how to prevent, detect, and respond to tampering or other malicious, criminal, or terrorist actions or threats will be incorporated into training programs for staff
 - b. We will encourage staff support in the food security awareness program, demonstrating the importance of security procedures to the staff.
6. Unusual behavior. We will watch for unusual or suspicious behavior by staff (for example, staff who, without an identifiable purpose, stay unusually late after the end of their shift, arrive unusually early, access files/information/areas of the facility outside of the areas of

their responsibility; remove documents from the facility; ask questions on sensitive subjects; bring cameras to work).

Human element – public

1. We will inspect incoming and outgoing vehicles, packages and briefcases for suspicious, inappropriate or unusual items or activity.
2. We will restrict entry to the establishment (for example, checking visitors in and out at security or reception, requiring proof of identity, issuing visitors badges that are collected upon departure, accompanying visitors).
3. We will ensure that there is a valid reason for the visit before providing access to the facility - beware of unsolicited visitors.
4. We will verify the identity of unknown visitors. All authorized visitors will wear complete protective covering and abide by employee personal hygiene rules.
5. We will restrict access to food handling and storage areas (for example, accompanying visitors, unless they are otherwise specifically authorized).

Facility

1. Physical security. We will provide appropriate physical security.
2. Storage and use of poisonous and toxic chemicals (for example, cleaning and sanitizing agents, pesticides).
 - a. We will limit poisonous and toxic chemicals in the establishment to those that are required for the operation and maintenance of the facility and those that are being held for sale.
 - b. We will store poisonous and toxic chemicals in the secure chemical storage area.
 - c. We will ensure that poisonous and toxic chemicals are properly labeled.
 - d. We will use pesticides in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (for example, maintaining rodent bait that is in use in covered, tamper-resistant bait stations).
 - e. We will know what poisonous and toxic chemicals should be on the premises and keeping track of them.

Operations

1. Incoming materials and contract operations.
 - a. We will use only known, appropriately licensed or permitted (where applicable) contract manufacturing and packaging operators and sources for all incoming materials, including ingredients, compressed gas, packaging, labels, and materials for research and development.
 - b. We will take reasonable steps to ensure that suppliers, contract operators and transporters practice appropriate food security measures (for example, auditing, where practical, for compliance with food security measures that are contained in purchase and shipping contracts or letters of credit, or using a vendor approval program).
 - c. We will authenticate labeling and packaging configuration and product coding / expiration dating systems (where applicable) for incoming materials in advance of receipt of shipment, especially for new products.
 - d. We will follow delivery schedules, not accepting unexplained, unscheduled deliveries or drivers, and investigating delayed or missed shipments.

- e. We will supervise off-loading of incoming materials, including off hour deliveries.
 - f. We will reconcile the product and amount received with the product and amount ordered and the product and amount listed on the invoice and shipping documents, taking into account any sampling performed prior to receipt.
 - g. We will reject suspect food.
2. Storage.
 - a. We will follow this system for receiving, storing, and handling distressed, damaged, returned, and rework products that minimizes their potential for being compromised or to compromise the security of other products (for example, destroying products that are unfit for human or animal consumption, products with illegible codes, products of questionable origin, and products returned by consumers to retail stores).
 - b. We will keep track of incoming materials and materials in use, including ingredients, compressed gas, packaging, labels, salvage products, rework products, and product returns.
 - c. We will investigate missing or extra stock or other irregularities outside a normal range of variability and reporting unresolved problems to appropriate law enforcement and public health authorities, when appropriate.
 - d. We will store product labels in a secure location and destroying outdated or discarded product labels.
 - e. We will minimize reuse of containers, shipping packages, cartons, etc., where practical.
 3. Security of water and utilities.
 - a. We will limit, to the extent practical, access to controls for airflow, water, electricity, and refrigeration.
 - b. We will identify alternate sources of potable water for use during emergency situations where normal water systems have been compromised (for example, trucking from an approved source, treating on-site or maintaining on-site storage).
 4. Finished products.
 - a. We will perform random inspection of storage facilities, vehicles, and vessels.
 - b. We will consider using locked and/or sealed vehicles and providing the seal number to the consignee.
 - c. We will establish scheduled pickups, and not accepting unexplained, unscheduled pickups.
 - d. We will keep track of finished products.
 - e. We will investigate missing or extra stock or other irregularities outside a normal range of variation.
 5. Mail / packages. We will implement procedures to ensure the security of incoming mail and packages.

1. Information and/or training in handling emergencies, to include power outage and water contamination, shall be given to all personnel.
2. Personnel shall call 911 for emergencies, which include fire or any life-threatening situations.

RECALLS

There are three classes of recalls: 1) emergency; 2) priority; 3) unlikely to cause adverse health consequences.

1. Recall procedure for product that has been shipped to stores (retail facilities)
 - a. Investigate problem at production facility.
 - 1) Identify problem. Check lot number of identified product to determine amount of product and resolve problem.
 - 2) Determine amount of product from this run. Locate all packaged or bulk product to compare to production lot number of identified product.
 - 3) Put all suspect product with identified lot number on "HOLD."
 - 4) Notify General Manager or Plant Manager and Customer Service. Customer Service will determine from invoices who has received this product and when. [Outlets (warehouses and retail facilities) will be notified of problem and, depending on situation, will be asked to return or destroy product.]
 - b. Communicate with outlets.
 - 1) Pull identified product from store shelves and inventory.
 - 2) General Manager will call the Department Manager for that product at store(s), instructing Department Manager to pull identified product from store shelves and inventory. The General Manager will also voice mail all General Managers and all Department Managers to check for named product in their stores.
 - 3) Information given will include product, name, date(s), and size(s) and lot number.
 - c. Communicate what to do with pulled product.
 - 1) If identified product is to be returned to production facility: instruct stores that a driver will pick product up after leaving the driver a pick-up slip.
 - 2) If product is not to be returned: instruct stores to dispose of product.
 - d. Issue credit to stores for product. The stores will be credited for proper amounts.
2. Recall procedure for product that has NOT been shipped
 - a. Investigate problem.
 - 1) QC facilitator or Plant Manager will identify problem and amount of product involved. Check lot number of identified product to determine amount of product and resolve problem.
 - 2) Put identified product on "HOLD."
 - 3) Notify Customer Service for shortages.
 - 4) Determine if identified product can be salvaged by reworking. If not, dispose of and fill out "HOLD" and Product Disposal Sheet that is kept on file.

FOOD SABOTAGE

Employees shall be alert to the potential for sabotage of food products. Employees shall inform management immediately if there is any unusual handling of food and/or possible contamination of food.

EMERGENCIES

3. Recall capability. Periodic mock recalls will be conducted and records will be kept to determine the capability of the manufacturer to reconcile the amount of product, in inventory and in distribution. Any deficiencies in the recall procedure will be identified and corrected.

TRACEABILITY

1. All raw ingredients and packaging materials (food contact) must be traceable throughout the manufacturing process, to the first level of distribution ("one up"). The supplier, quantity, lot code, and received date must be documented for all raw ingredients and primary packaging materials (food contact) at receiving ("one back").
2. All raw ingredient supplier, lot code, and quantities must be documented for each production batch.
3. All consumer packages must be clearly marked with a lot code.
4. Source ingredient lot codes and quantities must be traceable for all rework.
5. All work-in-process must be traceable to ingredient lot numbers and quantities.
6. The lot code and quantity of all finished products must be documented at the time of shipping.
7. The trace system will be tested at least annually and test methods documented.

EMPLOYEE-CUSTOMER REPORT OF QUALITY OR HAZARD PROBLEM AND DISPOSITION

1. Please describe the hazard or problem. _____

2. What effect does this have on our operation? _____

3. What do you think is the cause? _____

4. What is your recommendation to remove the cause of the hazard or problem? (NOTE: This is optional on your part. You may leave this portion blank.) _____

Name _____ Date _____ Time _____
Department where the hazard or problem was observed _____

*You will be contacted within 48 hours to acknowledge your QA Problem Report.
This report will not be considered resolved until the solution is approved by your signature on this document.*

FOODBORNE ILLNESS INFORMATION FORM

Information received from _____

Address _____

Phone (____)____ (H) (____)____ (W)

What is the best way to contact you? _____

Name of person with illness _____

Address _____

Phone (____)____ (H) (____)____ (W)

What is the best way to contact this person? _____

Complaint: _____

Place food was eaten _____

Date/Time food was eaten _____

Date/Time food was saved _____

Suspect food _____

Waitress/waiter _____

Where did customer sit? _____

Is customer taking medication? _____

What type? _____

Was medical care sought? _____

(doctor/hospital/address)

Food items consumed

Appetizer _____

Salad (bar _____

Dressing _____

Main course _____

Side dish _____

Beverage during meal (including water) _____

Bread & butter _____

Dessert _____

Names of other persons in the party.

1. _____

3. _____

5. _____

7. _____

2. _____

4. _____

6. _____

8. _____

ANALYSIS OF AN ALLEGED FOODBORNE ILLNESS

Completed by: _____

1. Date _____; time _____ food was produced

2. Who was involved in making and serving the food?

Ordering: _____

Storage: _____

Pre-preparation: _____

Preparation: _____

Serving, leftovers: _____

3. What ingredients were used, how much, from what source?

Ingredients	Amount	Source

4. What was the preparation procedure? Do a flow chart from preparation to consumption.

START

Explain procedure, any deviations that occurred, and corrective action.



1. Procedure	
Ti To t	



2. Procedure	
Ti To t	



3. Procedure	
Ti To t	



4. Served- consumed	
Ti To t	



5. Leftovers	
Ti To t	



USUAL INCUBATION / ONSET PERIOD RANGES FOR SELECT FOODBORNE DISEASES

ILLNESS AGENT	ONSET TIME																								
	HOURS						DAYS																		
	1	2	3	4	8	16	1	2	3	4	6	8	10	12	14	16	18	20	25	30	35	40	45	50	
Allergen, chemical poison, minutes to a few hours	█	█	█																						
<i>Bacillus cereus</i> , vomit 30 minutes to 5 hours; diarrhea 8 to 16 hours, mean 12 hours		█	█	█		█																			
<i>Staphylococcus aureus</i> 1 to 8 hours; mean 2 to 4 hours		█	█	█																					
<i>Vibrio parahaemolyticus</i> 4 to 96 hours					█	█	█	█	█	█															
<i>Salmonella</i> , non-typhoidal, 6 to 72 hours; mean 18-36 hours					█	█	█	█	█	█															
<i>Clostridium perfringens</i> , 8-24 hours; mean 10 hours						█	█																		
Norwalk-like viruses, 16 to 48 hours							█	█																	
<i>Yersinia enterocolitica</i> , 1 to 3 days								█	█																
<i>Shigella</i> , 1 to 7 days								█	█	█	█	█													
<i>Campylobacter</i> , 2 to 7 days mean 3 to 5 days								█	█	█	█	█													
<i>Cyclospora cayentanenus</i> , 2 to 8 days; mean 7 days								█	█	█	█	█													
<i>E. coli</i> O157:H7, 3 to 7 days								█	█	█	█	█													
<i>Listeria monocytogenes</i> , 4 to 21 days											█	█	█	█	█	█	█	█	█						
Hepatitis A, 10 to 50 days, mean 25 days														█	█	█	█	█	█	█	█	█	█	█	

Sources:
 Data on the "usual" incubation period obtained from the CDC, "Surveillance for Foodborne-Disease Outbreaks—United States, 1988-1992." MMWR 45, SS-5 (October 25, 1996):58-66.
 Economic Research Service / USDA. Product Liability and Microbial Foodborne Illness / AER-799.

QA, QC, and the HACCP Team

QA, QC

CONTROL OF NON-CONFORMITY

We will evaluate our performance using the 6 σ quality standard for process and product performance. We will strive to eliminate any special causes of non-conformity and reduce common causes of deviation.

Evaluation of finished products must be conducted by Quality Control prior to release. Evaluation must include inspection for correct packaging, coding, labeling, formulation, and relevant physical characteristics of the food. Appropriate records must be made and kept on file.

FACILITIES, EQUIPMENT, AND PROCEDURES

1. The Quality Control department will be designed, equipped, maintained and of sufficient space to suit the operations performed in them. This will include provision for writing and recording and the storage of documents and samples with refrigeration as required
2. Separate rooms will be provided as necessary to protect sensitive instruments from vibration, electrical interference, humidity, etc. Care should be taken to avoid contamination in either direction between laboratories and manufacturing areas, and reagents or materials that could cause taint should ideally be kept in a separate building. Provision should be made for the safe storage of waste materials awaiting disposal.
3. Trained employees shall calibrate equipment and instruments on a regular basis. Records will indicate the calibration schedule and should also keep track of when the calibrations were made.
4. Written operating instructions should be readily available for each instrument.
5. Sound scientific methods shall be employed with respect to taking samples, using reference standards, using reagents, executing the procedure and documenting the results or any variances therein in the process or the sample. Methods should be chosen with care to fulfill the needs of analyses. For quality control purposes, the chosen method should be that most efficacious for the accuracy and speed of results needed, and the skill of the staff concerned. Whenever possible, acceptable methods should be used. In all cases method checks need to be incorporated into any analytical scheme to ensure reproducibility, repeatability and operator independence.
6. The AOAC official methods handbook will be used as a reference for methodology and sample analysis.

MAP (MODIFIED ATMOSPHERE PACKAGING)

We will control MAP using _____.

THERMOMETER CALIBRATION

Bimetallic coil thermometers that require calibration will not be used.

Thermometer accuracy verification will be conducted monthly and recorded on the **Equipment / Instrument Calibration and Verification Log** (See Encl. B1.)

Slush ice calibration. Slush ice will be used as a cold-temperature standard. It will be made by crushing about half a pound of ice, putting it into an 8-ounce or larger container and adding tap water to just below the top of the ice. Thus, a slurry with a temperature of 32°F is made. This ice slurry verification standard will be taken to the location of the various thermometers, or the thermometers will be taken to the standard. The thermometers will then be immersed into the middle of the ice and stirred a little. A reading will be taken after 30 seconds of immersion and stirring, when the temperature has stabilized. The reading must be within $\pm 2^\circ\text{F}$ of 32°F. The reading will be recorded on Encl. B1.

If it is greater than $\pm 2^\circ\text{F}$ of 32°F, and it is an inexpensive digital thermistor thermometer, the thermometer will be thrown away and a new unit will be obtained from stock. If it is a thermocouple thermometer, the unit will be returned to the manufacturer for calibration.

High-temperature calibration. For verification of accuracy at pasteurization, a precision digital thermometer, such as the Omega HH41, that is accurate to 0.1°F will be used. A stirring hot plate or equivalent heating device with a beaker filled with salad oil and covered with aluminum foil will be heated to about 160°F. It will be adjusted using the digital precision thermometer until it is steady to $\pm 0.2^\circ\text{F}$. Thermometer tips will be immersed in the oil, and the temperature compared with the precision digital thermometer. They must be within 1°F of the calibration point or repaired or replaced.

VERIFYING REFRIGERATOR TEMPERATURES

Refrigerator temperature will be taken and recorded 3 times a day using the **Refrigerator Temperature Log** (Encl. B2.). If the temperature is $>5^\circ\text{F}$ from the target, refrigerator maintenance will be called. If it is $>10^\circ\text{F}$, the food will be immediately transferred to a working refrigerator.

SANITIZING SOLUTIONS

Sanitizing solutions from each _____ system will be checked daily and the results recorded on the **Sanitizing Solution Verification Log** (Encl. B3). If the variation is $>\pm$ _____ from the target of _____, chemical supply company will be called and the equipment adjusted.

MICROBIOLOGICAL TESTING

Microbiological data will be recorded on the form entitled **Microbiological Testing of Production Plant Food Items** (Encl. B4).

1. **Salmonella testing.** All ready-to-eat dry product manufacturers, including confections, cereals, pet foods, dehydrated foods (fruits and vegetables), nuts, seeds, dry-blend powders, etc. must operate an ongoing surveillance program for *Salmonella* in the environment. Sampling must include floor sweepings in ready-to-eat production areas, dry filter screens in the same areas, and other appropriate samples. Corrective action is necessary if any positive results are reported.
2. **E. coli testing.** Designated products will be tested for *E. coli* Biotype I, per 9CFR 310.25, as a verification of the supplier's *E. coli* control program.

For example, one sample from a lot of beef from each supplier will be tested once a month. If no beef is received from a specific supplier during the month, we will postpone sampling that supplier until we receive a shipment. During the month, one random sample will be taken from a lot of ground beef received or beef that could end up as trim. The sample will be 3 to 5 ml of purge from the plastic bag holding the beef. Wipe with a sanitizer the outside area of the bag where it will be punctured and then, make a small hole for a pipette to fit through and withdraw 3 to 5 ml into a sterile plastic Whirlpak. Label the Whirlpak carefully and record on the **Sample Identification Sheet** (Encl. B5). the exact name of the source lot number, date, time, and who took the sample. Embargo that lot of beef until the test comes back in about 1 day. The sample will be delivered to the lab. Note that the name of the employee taking the sample to the lab will be recorded on the sample certification sheet. Note that this test only requires about 5 samples to be analyzed a month, only for generic *E. coli*, and the embargo of the lot until the results are returned from the lab in about 1 day.

If the lab results show <100 *E. coli* per ml, the meat is fully acceptable and will be used. If the count is between 100 and 1,000 *E. coli*, the supplier will be notified and asked what can be done to reduce the count to below 100 *E. coli* per ml. The meat will be used. If the count is greater than 1,000 per ml, the beef will be diverted to the kitchen for cooking, and no more beef will be purchased from that supplier until that supplier can show evidence that it can supply meat with <100 *E. coli* per ml.

3. **Microbiological Environmental Sampling of the Environment for *Listeria* spp. Control.** FSIS Directive 10,240.3 describes the USDA's sampling protocol for ready-to-eat products. The advantage to doing the indicator organisms *Listeria* spp. sampling is that the USDA will place the operation in its targeted verification program rather than its intensified verification program, which means, FSIS takes fewer food verification samples.

Environmental area samples will be taken in the ready-to-eat processing and packaging area. These are not food samples or food contact surface samples. These are samples from areas where ready-to-eat products are stored, further processed, or packaged. These are samples from places in the ready-to-eat area that could be sources of *Listeria* spp. such as mop handles, floor drains, cracks in floors, hoses on floors, and refrigerator coils.

Samples of surfaces will be collected during a production shift or toward the end of the shift.

Once a month, 3 environmental swabs will be taken in the ready-to-eat production or packaging area. A floor drain will be sampled, as will the foot area of a table leg and a third, random choice of a niche or crevice area. The swab should cover an area of 2 square inches up to 8 square inches.

Swab kits can be provided by the Hospitality Institute of Technology and Management consisting of letheen broth in a 10-ml tube and Dacron swabs. The swab will be wetted in the broth, the area swabbed, the swab rinsed in the broth, the area swabbed again, and rinsed again. The tube will be labeled and a **Sample Identification Sheet** prepared (Encl. B5). The sheet will identify the date, time, location, who collected the sample, and what was sampled.

_____ (name of microbiological analysis laboratory) will be used for recovery. If the sample cannot be delivered to the laboratory immediately, it will be refrigerated at 40°F and delivered within 24 hours. The sample will be kept secure during that time. The name of the person insuring the security of the sample will be recorded on the sample form.

The results will come back from the laboratory within 48 hours. If the sample is negative for *Listeria* spp., the process area is in control. If a sample is positive for *Listeria* spp., an intense, deep cleaning of everything within 20 feet of the positive site will be done that evening. The site will be sampled again the next sampling time.

The results will be recorded on the **Microbiological Environmental Testing Report** (Encl. B6).

***Listeria* Control Program for Ready-To-Eat Food, 9CFR 430 – Example.**

1. The one group of products that meet the criteria for *Listeria monocytogenes* control in accordance with 9 CFR 430 for ready-to-eat food is salads. They are eaten by the consumer as produced in the plant.
2. It is not possible to apply a post-processing lethality process or to use an anti-microbial agent, because the desired flavor of the salad will be changed, so sanitation measure only will be used for control.
3. According to 9 CFR 430, if the food production facility is classified as a small process plant, the suggested number of *Listeria* spp. environmental samples to do per month in the post lethality processing area for this production line is two.
4. The post lethality processing areas where the ready-to-eat ingredients could become contaminated are:

Soup cooler
Salad room.

The prime harborage for *Listeria* in these areas that will be sampled are the salad mixing in a cold packing room:

Door frames to cooler
Drains
Overhead refrigerated fans and coolers
Cracks in floor
Mixers
Tubs used for mixing
Pails used for finished food storage
Utensils (scoops)

5. The **sampling procedure** is as follows:

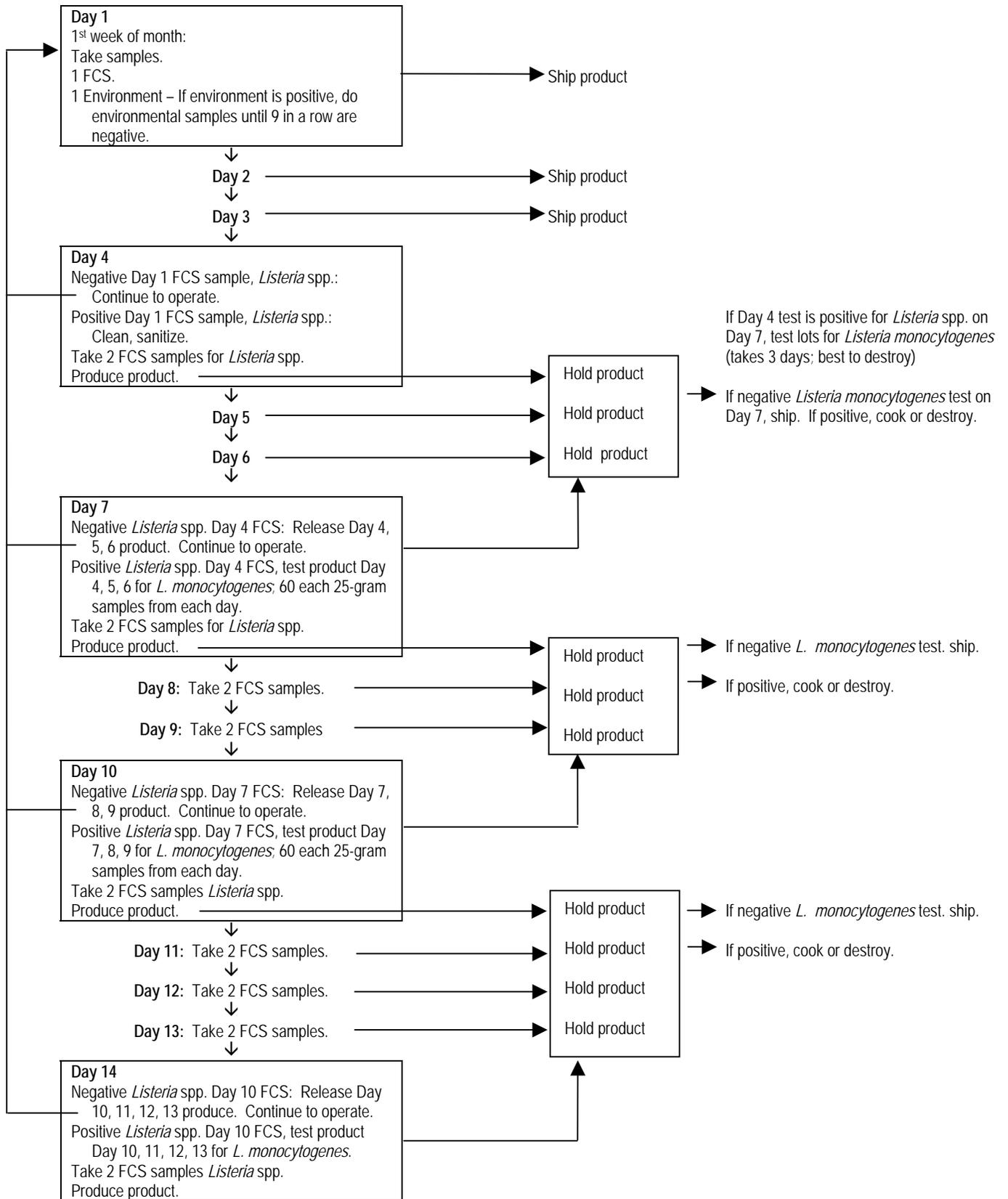
During the first week of a month, QC will select two items / areas to be sampled from the above list. One will be a food contact surface, the other will be a non-food contact area. This is **Day 1**. A sponge sample will be taken of a 12" x 12" food contact surface that has been in use, if possible, for 3 hours. Immediately thereafter, the equipment will be washed, rinsed, and sanitized before the next batch is produced. Another sample will be taken of a possible non-food contact surface where *Listeria* might multiply. The item will be immediately washed, rinsed, and sanitized. The samples will be kept at <40°F and plated by the contract laboratory for *Listeria* spp., using USDA laboratory methods. The results will be recorded by QC and reviewed and shared with the USDA.

If there is a positive result from a first sample, assuming it takes 3 days to get a test result back from the lab, do the following.

Day 4: If FCS (food contact surface) sample positive (from Day 1) for *Listeria* spp.

- a. Take corrective action. Product prepared up to this second sample time, can be shipped.
- b. Do intensified cleaning and sanitizing of the equipment and area.
- c. Test FCS (target most likely source of contamination) and do 2 additional *Listeria* spp. tests in surrounding FCS area.
- d. Production can be continued, but product should be put on HOLD in case the second testing is positive, because the food must be recalled / tested if the second test is positive.

FLOW CHART OF *LISTERIA* CONTROL IN READY-TO-EAT FOODS PRODUCTION



Day 7: Second FCS sample (from Day 4) positive for *Listeria* spp.

- a. Take corrective action, to include dealing with product placed on HOLD from Day 4. Throw the product away or do intensified *Listeria* testing on 60 samples from the lot. All 60 samples must be negative to use the lot.
- b. Do intensive cleaning and sanitizing.
- c. Test FCS (target most like source of contamination) and do 2 additional *Listeria* spp. tests in surrounding FCS area.
- d. Production can be continued, but hold product from the day's production, in case this sample comes back positive.

Day 8:

- a. Test FCS (target most likely source of contamination) and do 2 additional *Listeria* spp. tests in surrounding FCS area.
- b. Hold product from this day's production.

Day 9:

- a. Test FCS (target most likely source of contamination) and do 2 additional *Listeria* spp. tests in surrounding FCS area.
- b. Hold product from this day's production.

Day 10: If FCS sample (Day 7 sample) is negative for *Listeria* spp.:

- a. Continue production and release product from Days 7, 8, and 9 production.
- b. Resume FCS testing according to frequency stated in sanitation program.

If FCS sample (Day 7 sample) is positive for *Listeria* spp.

- a. Hold product from Day 10 production.
- b. Test product from Days 7, 8, 9, and 10 for *Listeria monocytogenes*.
- c. Take corrective action.
- d. Do intensive cleaning and sanitizing.
- e. Take FCS sample (target most likely source of contamination) and do 2 additional *Listeria* spp. tests in surrounding FCS area.

Day 14: If product is positive for *L. monocytogenes*, do not release product to commerce and destroy product, or rework product with a process that is destructive of *L. monocytogenes*.

Every time there is a second or more (consecutive) FCS positive, product is tested for *L. monocytogenes*. Only product lots implicated with a second or more consecutive FCS positive are held and tested. Every time there is a product positive for *L. monocytogenes*, product is recalled, if not held, and destroyed or reworked with a listericidal process. Once the FCS testing is negative, implying that the corrective action is working, production is continued.

Repeated FCS positives will imply a critical sanitation problem and the establishment will need to conduct intensive testing and intensive cleaning and sanitizing.

Non-food contact surface action when there is a positive result. If a non-food contact surface sampling site is found to be positive for *Listeria* spp or *Listeria*-like organisms during routine monitoring, intensified sampling is initiated as soon as possible. Under intensified sampling, 3 samples per day (one each at pre-op, 1st shift, 2nd shift) are analyzed

until a total of 9 consecutive samples have been taken and are negative for *Listeria* spp at that particular site. Swabs are analyzed for each day of production. If a sample finding is positive, testing of that site continues until 9 consecutive samples are negative for *Listeria* spp. or *Listeria*-like organisms. Once 9 consecutive samples are found negative, that site will return to routine sampling.

NEW PRODUCT FORMULATION AND DEVELOPMENT

It is vital that product formulations be done systematically in order to assure that customer satisfaction is maintained and that safety is not jeopardized. Encl. B7, **Product Formulation (Recipe) Change** is a flow chart for the systematic change of a product formulation.

The recipe is the foundation for quality assurance and hazard control. When changing a recipe / formulation, many points must be considered. Encl. B8, **Product Formulation (Recipe) Change Checklist** provides guidance for recipe change.

When developing new products there should be a schedule. Encl. B9, **New Product Development Project Schedule** can be used to set up a new product development project.

New product process development must be done systematically to prevent mistakes. Encl. B10, **New Product Process Development** provides a systematic procedure.

REFRIGERATOR TEMPERATURE LOG

Date	Time	1. _____ Temp. (°F)	2. _____ Temp. (°F)	3. _____ Temp. (°F)	4. _____ Temp. (°F)	5. _____ Temp. (°F)	6. _____ Temp. (°F)	Initials	Comment(s)
	am _____ midday _____ pm _____	_____ _____ _____							
	am _____ midday _____ pm _____	_____ _____ _____							
	am _____ midday _____ pm _____	_____ _____ _____							
	am _____ midday _____ pm _____	_____ _____ _____							
	am _____ midday _____ pm _____	_____ _____ _____							
	am _____ midday _____ pm _____	_____ _____ _____							
	am _____ midday _____ pm _____	_____ _____ _____							
	am _____ midday _____ pm _____	_____ _____ _____							

SAMPLE IDENTIFICATION SHEET

Date: _____ Time: _____ Person sampling: _____

Sample description

Food	Environment

Comments / other information: _____

SAMPLE IDENTIFICATION SHEET

Date: _____ Time: _____ Person sampling: _____

Sample description

Food	Environment

Comments / other information: _____

SAMPLE IDENTIFICATION SHEET

Date: _____ Time: _____ Person sampling: _____

Sample description

Food	Environment

Comments / other information: _____

PRODUCT FORMULATION (RECIPE) CHANGE

Below is a brief summary of steps taken to change product formulation. Changes will not be made until this process has been followed and approvals obtained. Standard product formulations will be followed.

Person with idea for change: talk with supervisor or QC facilitator



Supervisor talks with QC (Quality Control) facilitator and/or Plant Manager, and/or Production Manager. Group discusses change. Completes HACCP analysis of product formulation (recipe) with proposed change.



Plant Manager or Production Manager gives approval or denies change



If approved, prepare sample batch



Approve product formulation (recipe) change



Product formulation (recipe) is retyped



QC Facilitator proofs product formulation, verifies Critical Control Points, updates books



QC Facilitator or Plant Manager reviews change with supervisors and crew leaders in shift meetings



Supervisors train cooks in department on change; review Critical Control Points for product formulation.

The following checklists will be used for product formulation (recipe) changes and new product development.

PRODUCT FORMULATION (RECIPE) CHANGE CHECKLIST

Note: If this is a project proposal, fill out Section 1 and submit to the Project Coordinator for approval.

SECTION 1

Proposal or approved project: _____

Food item(s): _____

New food item name, if applicable: _____

Person(s) initiating project: _____

1. Proposed ingredient item change (describe in detail, include priority and resources available):

2. Reason for ingredient item change:

3. Special concerns and comments (continue on back if necessary): _____

SECTION 2

Project leader: _____

Team members: _____

Start / proposal date: _____

1. Checkpoints / important dates in project:

Project leader, QC, and Production Manager informed: _____ Team started: _____

Test recipe taste test: _____ Final recipe taste test: _____

Pilot test date: _____ Production by: _____

File: Quality Control Approved / not approved: _____

Production Office _____

Comments: _____

NEW PRODUCT DEVELOPMENT PROJECT SCHEDULE

Date: _____

Project: _____

Done	Issues	Person Responsible	Date
	Quality Control Issues		
	Stage 1		
	Develop and test recipe (product formulation)		
	Duplicate recipe 2 times _____ (see below)		
	Preliminary food cost		
	Taste panel approval: random, Senior Management Team		
	Stage 2		
	Develop and test large scale production formulation		
	Address cost issues (see section below)		
	HACCP analysis complete		
	Nutritional analysis complete		
	Taste panel approval: Department managers, Senior Management Team		
	Product formulation final and approved by General Manager		
	Finalize roll-out and follow-up plan; pricing information to stores		
	Warehouse issues		
	New ingredient specifications, source		
	Deleted items: effect on present inventory and plan		
	Storage/shelf life issues with new ingredients/ menu item		
	Date when inventory needed for production		
	Equipment issues		
	New equipment requirements		
	Current equipment adjustments		
	Packaging issues		
	Packaging requirements		
	Operations issues		
	Staffing needs		
	Training		

New Product Development Project Schedule (Cont'd)

Project: _____

Done	Issues	Person Responsible	Date
	Cost issues		
	Theoretical food cost; change if applicable		
	Actual production food cost		
	Estimated impact on labor cost		

	Operations and Labeling issues		
	Procedure requirements		
	Nutritional, ingredient information		

	Roll-out schedule		

	Review schedule		

**NEW PRODUCT / PROCESS DEVELOPMENT:
Product Description, HACCP Product, Development Sequence, Validation, Implementation**

Product Description

HACCP Product Formulation (Recipe)

Development Sequence

- Product testing
- Microbiological challenge testing
- Shelf life studies
- Ingredient purchasing specification
- Documentation review

Validation of each step in development

Implementation

- Training
- Roll out

HACCP TEAM

SELF-INSPECTION AND FOOD HAZARD CONTROL CHECKLISTS

By knowing the hazards involved in the production of food products, producers can design their own self-control programs that can be used by both management and employees to produce safe, designated quality food products. Encl. B11 is an example of a **Daily QA Checklist** for HACCP team use. This checklist focuses on critical hazard control points in the processing facility and provides space for recording the names of people observed, equipment and food names and temperatures, and thereby, becomes a single document of record for a day. A **System Capability Monthly Audit** is at Encl. B14. It would be done, along with Encl. B11, once a month.

All units are subject to federal, state, county, and municipal regulations, and are inspected by officials from one or more of these governmental agencies. Inspection forms used by these agencies will vary, but the basic points are usually similar. Food safety, namely, procedures that minimize the potential for foodborne illness, are of primary concern. Food protection, personnel responsibilities, food equipment, utensil use, and good safety procedures must be observed. Structure and utilities must be checked. Detailed operation management and inspection standards should be written and available for review by regulatory agencies. These standards must be itemized in a detailed checklist.

HACCP TEAM OPERATIONS

Our HACCP team analyzes food process problems observed by both management and employees. We solve problems and set objectives that support policies and standards, and move one step at a time for continuous quality improvement.

Regular meetings are held monthly so that the HACCP team can review procedures, set objectives, and send them forward, when necessary, to management for resolution.

Member code of conduct. Members must follow this Code of Conduct in order to ensure that the improvement process is orderly.

1. Attend all meetings on time.
2. Document discussions and meeting decisions.
3. Follow policies, procedures, and standards of the facility.
4. Actively participate with ideas and follow-through (complete work which is assigned).
5. Freely express ideas and suggestions.
6. Criticize ideas, but never people.
7. Actively listen to contributions from others.
8. Actively participate in improvement projects.
9. Value all people and do the best to expand the capabilities of everyone.
10. Never use the process to solve people relationship problems. Supervisors handle personnel problems.
11. Realize that a major benefit of membership is individual self-fulfillment in knowing that all personnel are working together to eliminate problems that block the growth and quality excellence of the unit, thereby helping the company and the unit to serve safer and better quality food, with greater operating productivity.

HACCP team functioning. The HACCP team solves unit food process problems. There can be a number of these teams in a large company. Team size should be limited to eight to twelve members. All members of the team are expected to actively participate.

Team membership is composed of representatives from each of the major operating segments of the organization. Typically, this includes personnel from the following areas:

1. Management
2. Purchasing
3. Maintenance
4. Production
5. Cleaning and sanitation
6. Packaging
7. Storage, receiving, shipping

In addition there is the HACCP Consultant / Facilitator, who is not an official member but is the science advisor.

Team leader. The group will elect a team leader. The leader will conduct meetings and to guide the problem-solving process. This person ensures that members follow the code of conduct and acts as the liaison between it and the facilitator. The purpose of the leader is to make it possible for each member to make a maximum contribution.

One of the leader's most important skills is the ability to chair meetings. Chairing, in a broad sense, involves more than conducting the meetings. Part of the responsibilities include budgeting time, starting and stopping on time, ensuring that each member is provided with agendas well in advance of each meeting, ensuring that each member participates, ensuring that records are kept, and replanning for a successful meeting.

Leaders must also "jog" memories, ensure that work is completed on time, encourage team effort, train, and be pleasant and enthusiastic.

Roles individuals play in groups. The following are typical roles that members of a HACCP team can perform to make the group or team process more productive and allow the discussion leader to concentrate on guiding the discussion through the topics. These roles should rotate to different members at each meeting.

The Facilitator. The facilitator can be the HACCP consultant. The facilitator generates the agenda items, including time spent on each topic, and makes sure those group members who want to submit or present topics have done so. He/she controls discussion so that it is orderly and no one dominates the group. The facilitator endeavors to keep "personalities" out of the discussion and prevents personality conflicts and any form of personal negative attack among members. The facilitator might need to interrupt a person and say, "Frank, what you are saying does not relate to the topic. Could you please tell us how your thoughts pertain to the topic?" The facilitator keeps track of the time spent on each topic, guides the group to stay on task within the time limits of each topic, and makes sure that all topics are covered during the meeting. The facilitator might say, "That is not a topic on the agenda for this meeting. Do you want it to be added?"

The Organizer. The organizer makes sure that the agenda for the upcoming meeting is distributed in time. He/she reminds people of the meeting and what topics they agreed to report on.

The Presenter. The presenter is a person who makes a topic report on behalf of someone who is not present.

The Writer. The writer takes written notes and prepares a one-page written summary of the meeting. One purpose of the notes is to prevent discussion of topics that have been previously addressed. The writer might say, "The notes indicate that we discussed that on November 6th and decided _____."

The Encourager. The encourager encourages each member's participation. The encourager might say, "Pete, we haven't heard from you. What are your thoughts?"

The Inquirer. The inquirer asks questions and focuses the group's attention on facts and figures and on the methods that the group uses to interpret facts and figures. For example, an inquirer might say, "Let's get down to cases. Just how many times a week does this problem occur?" or "Something must be going wrong here. Accounting reports indicate that breakage has increased by 13% since the new dish machine was installed." The inquirer can also obtain information for the group.

The Elaborator. The elaborator contributes to problem solving by translating generalizations into concrete examples or by suggesting what might be the effects of a proposed course of action. For example, an elaborator might say, "Let's imagine what would happen if we applied that idea to our own situation."

The Checker. The checker periodically checks during the meeting on each group member's understanding of what he/she heard presented. The checker might say at the end of a 5-minute presentation, "Lynn, what did you understand Pete to say?"

The Evaluator. The evaluator raises questions about practical applications of a proposed solution. The evaluator might say, "If we follow this plan of action, will we completely solve the problem?" He/she might try to help the members to settle on a specific course of action by saying, "This discussion is very interesting, but is it really helping to solve our problem?"

The Praiser. The praiser praises members for contributions. He/she makes sure that each individual feels like a valued member of the group. The praiser might say at the end of a presentation, "Mike, I thought that was a very clear presentation of the facts."

The Summarizer. The summarizer contributes to the group by clarifying and summarizing the group's position in terms of agreed-upon objectives. A summarizer might say, "When we began this discussion, we thought the problem was with the equipment. Do we now agree that the problem may be with work methods?" In addition, at the end of a topic, he/she summarizes the discussion to be sure that people understand the important points and makes sure that assignments are clear.

Some major areas for HACCP team action. When the HACCP team is ready to begin solving problems, it can use the list of the following areas or concerns to stimulate thinking. Members are sure to be able to find opportunities to improve the safety, quality, and productivity of operations in each of these areas.

1. Building / facilities
2. Equipment
3. Training of employees
4. Policies, procedures, and standards
5. Supplies
6. Production operations
7. Cleaning and sanitation (SSOPs)
8. Maintenance

Problem solving. Improvements take time and come through spontaneous member initiative from the HACCP team. The key is to have an orderly committee problem-solving process that will be able to solve problems with as few backward steps as possible. To control the process, members of the team should use the following problem-solving process. Each step should be documented as follows.

1. Identify problems and cost benefits of solving the problems
2. Select each problem on which to work, by team consensus; state the outcome clearly
3. Analyze problem
 - a. Isolate causes
 - b. Gather, display, analyze, and test causes until it is certain that the real causes have been found
 - c. Select causes for action by consensus
4. Generate solutions
 - a. List possible solutions
 - b. Analyze the cost benefit of solutions
 - c. Isolate solutions
5. Select/plan a solution
 - a. Choose "best" solution
 - b. Plan who, what, where, when, why, how
 - c. Gain endorsement and approval from those who must apply the solution
 - d. Test the solution and adjust until it works
6. Implement the plan
7. Measure progress and continue until the problem has been reduced or eliminated
8. Prevent the problem from ever recurring; change inadequate policies, procedures, and standards when necessary.

HACCP team meeting, report, and corrective action. A HACCP team meeting will be conducted and a **HACCP Team Monthly Meeting Report** written (Encl. B12). Any problems identified by the review will be corrected. If they are serious, the **Corrective Action Report** (Encl. B13) will be completed.

Filing the report. The review and meeting forms will be filed with this manual. They will be kept for one year. When the month comes a year later, the 12-month-old report will be replaced with the new report.

HACCP TEAM'S MEASURES OF SUCCESS

Approximately every six months, the team will take time to do self-evaluations of the following categories.

1. Member commitment and leadership
2. Effectiveness of people-to-people communication and caring
3. Attention to the team process
4. Adherence by members to the Code of Conduct
5. Orderliness of the performance improvement process
6. Realistic goals

7. Adequate training
8. Attention to awards and recognition
9. Well-defined roles and expectations for members
10. Quality promotional activities in the unit
11. Effective documentation and record keeping
12. Correct judgments; arriving at decisions by careful measurements and testing

OPERATIONAL IMPROVEMENT

Owners / CEOs / managers support improvement of unit performance.

1. Managers and employees shall constantly be aware of environmental conditions, equipment failure, and facility and process performance. Immediate action must be taken to correct problems.
2. Monthly audits will be performed by the HACCP team using the **System Capability Monthly Audit** (Encl B14) in order to evaluate prevention system weaknesses; analyze the cause of problems; take action through improved policies, procedures, and standards and system development to prevent future problems.
3. At the monthly meeting, the audit will be discussed as well as any customer complaints and employee suggestions. Regulatory suggestions will be discussed.
4. Corrective actions will be recorded using the **Corrective Action Report** (Encl. B13)
5. The completeness of the food production's food safety program will be reevaluated yearly. The auditor will ask the manager to show written evidence of an effective program. Manager(s) must demonstrate the effectiveness of the food safety program. The auditor will observe procedures, compare self-inspection and maintenance records with visual conditions, and will interview employees.
6. HACCP effectiveness will be audited using **USDA HACCP Evaluation Criteria** (Encl. B15)

HACCP REASSESSMENT

Once a year, or when any necessary changes to the food operation are made, the HACCP team will do a **HACCP Reassessment**, using Encl. B16.

DAILY QA CHECKLIST

Performed by _____ Date _____ Time _____

A. MANAGEMENT (HACCP Section II)		CORR. ACT #
A1 Consumer advisory	<input type="checkbox"/>	
B. PREREQUISITES (HACCP Section III)	PERSON / ITEM :	OBSERVATION
B1 Personal Hygiene Ill employees (name) _____ : _____ Hand wash (observed) _____ : _____ Soap, paper towel, hot water (adequate) _____ : _____ Gloves (changed) _____ : _____		
B2 Environment / facilities Cleaned, maintained (what was observed) _____ : _____		
B3 Equipment Food contact surfaces clean (equipment) _____ : _____ Sanitizer concentration (ppm) (red bucket) _____ : _____ Cleaning utensils (what item) _____ : _____ Wiping cloths in sanitizer bucket (clean sol.) _____ : _____ Sinks clean (which sink) _____ : _____ Refrigerator (1) (afternoon) Time _____ Temp. _____ °F Cleaned _____ Refrigerator (2) (afternoon) Time _____ Temp. _____ °F Cleaned _____ Refrigerated display case (afternoon) Time _____ Temp. _____ °F Cleaned _____		
B4 Preventive maintenance (item? What was done?) _____ : _____		
B5 Calibration Digital thermometer (32°F) (monthly) Reading _____ : Deviation _____ pH meter (pH 4 and 7) (weekly) pH 4 deviation _____ : pH 7 deviation _____		
B6 Ingredient storage / FIFO Date marking / label (what food) _____ : _____ Raw hazardous food on bottom / RTE top _____ : _____ Allergenic food separate (what food) _____ : _____ Chemical storage (what chemical) _____ : _____		
B7 Approved suppliers (Who? What food?) _____ : _____		
C. FOOD HACCP PROCESSES (HACCP Section IV)	FOOD :	OBSERVATION
C1 Physical hazards	_____ : _____	
C2 Allergens	_____ : _____	
C3 Double wash vegetables	_____ : _____	
C4 Ingredient pH, temperature at preparation	pH _____ : _____ °F Time _____	
C5 Pasteurization (3)	Item _____ °F Item _____ °F Item _____ °F Time _____	
C6 Hot hold / packaging	Item _____ °F Item _____ °F Item _____ °F Time _____	
C7 Product temperature in finished product refrigerated (3)	Item _____ °F Item _____ °F Item _____ °F Time _____	
C8 Food on hold	_____ : _____	
C9 Shipping	_____ : _____	

Corrective Action: a) Description of the problem; b) How was it eliminated?; c) Verification of control; d) List measures to prevent recurrence

Person completing report _____ Date _____ Reviewed by _____ Date _____

HACCP TEAM MONTHLY MEETING REPORT

HACCP Team

Initial if present
 (leader)

- Suggested topics**
1. Problems and corrective actions since last report
 2. Process changes
 3. Plans for improvement

Topics	Follow-up

Management review, comments: _____

Signature: _____ Date: _____

Process authority review, comments: _____

Signature: _____ Date: _____

CORRECTIVE ACTION REPORT ⁽¹⁾**Person completing report** _____ **Date** _____**Product / Process Name** _____**Process Step / CCP** _____ **Critical limit corrective action** **Quality corrective action**

- a. Description of the problem: *What was done immediately to take care of the problem? What was done with any questionable food?*
- b. Elimination. *It must include what action was taken to put process back into control according to Corrective Action plan.*
- c. Verification that process was back in control. *Show data that the critical control point was under control after correction: Example: Take data at the CCP for a time following corrective action to PROVE that problem was fixed.*
- d. List measures to prevent recurrence: *Examples: Training in use of nail brush, new thermometer, fans added to refrigerator, food panned <2 inches deep.*

Reviewed by _____**Date** _____

SYSTEM CAPABILITY MONTHLY AUDIT

Item	Monitoring (Who, When)	Deficiencies	Corrective Action
System			
Management HACCP team			
Policies, procedures, and standards manual			
Environment, utilities, waste			
Facilities and equipment			
Personal hygiene			
Cleaning and sanitizing in operation			
Training			
Emergency plan / food security			
Supplier certification			
Inventory			
Ingredients			
Finished product			
Receiving			
Trucks			
Authorized suppliers			
Condition of ingredients			
Cross Dock			
Production			
Schedule is reasonable			
Product flow			
Recipe monitoring			
Ingredient lot numbers			
Amounts of ingredients			
Temperature and time			
Packaging			
Shipping			
QC pre-ship verification all CCP's were met			
System was in control			
Ingredients were not in recall			
Process was controlled			
Storage was in control			
Records			
Training			
Facility maintenance			
Equipment maintenance			
All process HACCP validated			
Shelf-life tests			
Supplier ingredients certification of critical limits			
Audit records of suppliers			
Storage records: product time/temps			
Recipe records			
Packaging QC, seals, and labeling			

Person conducting audit _____ Date _____

USDA HACCP EVALUATION CRITERIA

Requirement	Adequate Y/N	Comments
1. Before producing any new product, a hazard assessment is conducted to make sure that there are no significant hazards so that a HACCP plan is required.		
2. The establishment has a product description for the food item that includes the likely consumers of the finished product.		
3. The establishment has a diagram of the product flow in the establishment.		
4. There is a process flow chart of the steps in the process.		
5. The HACCP plan groups products into one of the USDA process hazard groups.		
6. There is an analysis of the steps in the process to find hazards that are reasonably likely to occur.		
7. The HACCP plan lists CCP(s) for each significant hazard and critical limits.		
8. The HACCP plan lists procedures to monitor each CCP and the frequency of monitoring.		
9. The HACCP plan lists the corrective action to be taken in case of a deviation from a critical limit.		
10. The HACCP plan lists procedures that the establishment uses to verify that the HACCP plan is effectively implemented and the frequency the procedures are performed.		
11. The HACCP plan documents, with values and observations, the monitoring of CCPs.		
12. The responsible establishment official has signed and dated the plan upon acceptance, at least annually, and when the plan is modified.		
13. The establishment has conducted validation activities to determine that the HACCP plan is functioning as intended. Records include: <ul style="list-style-type: none"> a. Monitoring of the CCP and conformance with critical limits. b. Corrective actions in case of deviations. 		

HACCP REASSESSMENT

Date:

HACCP Plan:

Are changes needed: Yes _____ No _____

Explain:

HACCP Revised on Date:
(add changes to HACCP Revisions Log in from of HACCP Manual)

HACCP Manager:

Date:

Plant Manager:

Date:

Training Program

TRAINING PLAN

Training and continuing education for all employees is the most important part of AMC-HACCP Total Quality Management. Employees are the individuals who carry out the policies, procedures, and standards of the food production facility. They must be given information concerning foodborne illness hazards and control so that they understand the need for performing their jobs in a designated manner. All employees must be given instruction for expectations of good personal hygiene and proper methods of hand washing while working in food preparation and food service. Encl. C1 shows a blank **Training Plan** form.

1. Personnel who are responsible for identifying sanitation failures or food contamination shall have a background of education and/or experience to enable them to produce safe food.
2. Training of individuals will be appropriate to the complexity of the manufacturing process and the tasks assigned.
3. Training for food handlers and supervisors shall include proper food handling techniques and food protection principles, and the danger of poor personal hygiene and unsanitary practices.
4. Personnel will be trained to understand the importance of the critical control points for which they are responsible, the critical limits, the procedures for monitoring, the actions to be taken if the limits are not met, and the records to be kept.
5. Personnel responsible for maintenance of equipment impacting food safety should be appropriately trained to identify deficiencies that could affect product safety and take the appropriate corrective action (i.e., in house repairs, contract repairs). Individuals performing maintenance on specific equipment should be appropriately trained.
6. Personnel and supervisors responsible for the sanitation program should be appropriately trained to understand the principles and methods required for effective cleaning and sanitation.
7. Records of training shall be maintained for current staff. Detailed job descriptions shall be provided for staff carrying out specific jobs.
8. All employees shall be issued with documented company rules with regard to hygiene policy.
9. Provisions shall be made to train those employees who are not proficient in English.
10. Additional training should be provided as necessary to ensure current knowledge of equipment and process technology.
11. An evaluation of skill proficiency should be part of the training program.

A good training program has two components:

1. Initial or orientation (new employee) training.
2. Ongoing or continuing education training. All employees must be trained in the procedures and standards that relate directly to their specific jobs, as well as to those policies that affect food safety in general (e.g., personal hygiene).

Encl. C2 shows a **Lesson Plan Form**

NEW EMPLOYEE TRAINING

All new employees must be given orientation training as soon as they are hired, using this HACCP manual. No one should be asked to do a task until he/she has been trained and he/she accepts the responsibility for doing the task with zero defects. All new employees must know the policies, procedures, and standards of the facility. An employee is not qualified or competent to safely perform assigned tasks until he/she has been taught to do the task and then can demonstrate performance of critical control points without coaching.

When employees are hired, they will be given a copy of this manual to read. They will then be tested using an employee readiness test. Encl. C3 (**New Employee Training Record**) will be signed by both the employee and trainer.

CROSS TRAINING

Personnel who hold responsibility for carrying out controls of hazards at critical control points (CCPs) and the management of CCPs will be identified on the Organization Chart (*SYSTEM AND OPERATIONS DESCRIPTION, Encl. 3*). Replacements will be identified and cross trained to carry out and manage CCPs.

CONTINUING EDUCATION AND EMPLOYEE RECERTIFICATION

1. Managers and supervisors will be re-trained at least every year. During the interim, they will keep themselves updated by reading professional magazines and books, and by attending seminars and courses. The **Continuing Education Training Record** (Encl. C4) will be used to record the training of personnel. Advanced training using the HACCP policies, procedures, and standards manual and special courses may also be recorded on Encl. C4.
2. The management staff will review the safety self-control foodborne illness information, which will be used to improve the operations manual and to coach employees to increased food safety assurance levels.

EMPLOYEE TRAINING RECORDS

Records will be kept for two years of employee participation in training activities and used to monitor employee development. Employee training is an investment in an operation's future. The more knowledgeable employees become, the more of an asset they are to a business. If litigation occurs, the court can be shown that employees were trained to use proper procedures.

TRAINING PLAN

Date	Who is to be taught	What is to be taught (Reference)	Instructor	Comments

LESSON PLAN FORM

Lesson title / topic

Instructor

Overview: Skills needed for success

Learning objectives / employee outcomes: By the end of this lesson, employees will be able to:

- 1.
- 2.
- 3.
- 4.

Length of lesson:

Lesson outline / sequence

In-class activities:

Materials (instructional aids, instructions / handouts / overheads / visuals):

NEW EMPLOYEE TRAINING RECORD

I hereby acknowledge that I have been taught, and I understand, the policies, procedures, and standards for performing my job responsibilities. I believe that I can do each task of my job to the desired standard. I will manage myself to strive for zero errors in performance. I will keep my supervisor fully informed of any suggestions I have to make food safety more certain. I will ask for help if I have any doubt about the prevention-assured way to perform a task.

Employee signature _____ Date _____

Trainer signature _____ Date _____

Subjects	Trainer Initials	Employee Initials
A. General HACCP food safety education (e.g., 1908; 1904)		
B. Company AMC-HACCP policies, procedures, and standards		
1. This is our company; description of the operation, company commitment, management of food safety, and continuous improvement		
2. Quality control responsibilities: calibration of instruments; process performance records		
3. Employee HACCP self-control and responsibilities of the employee for compliance		
4. Employee job responsibilities and employee's coach / trainer		
5. Personal hygiene, fingertip washing		
6. Cleaning and sanitizing work area and equipment		
7. Maintenance of equipment		
8. Receiving, storing, and handling supplies and food		
9. Food processes that employee will perform; procedures, hazards, control, monitoring, corrective action		

CONTINUING EDUCATION TRAINING RECORD

On _____, the people listed below were taught the following topics:
(date)

	Topic	Reference
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____

I acknowledge that on the date shown, I attended a training program in which the subjects listed on the other side of this page were taught and discussed. All of my questions about how to apply the knowledge have been answered. I believe that I can use the knowledge to meet the expectations of management. I will keep my supervisor fully informed or any coaching that I need or any suggestions I have to make operations more quality assured. I will always ask for help immediately if I have any doubt about how to perform a task correctly.

Signature of Employee	Signature of Trainer	Date	Test Score
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

