

GENERAL HACCP PLAN DEVELOPMENT GUIDELINES AT RETAIL

You have been informed that a process you wish to undertake in your retail food establishment requires an adequate HACCP plan. HACCP stands for Hazard Analysis Critical Control Points. The purpose of a HACCP plan is to ensure critical steps in your process are measured to ensure the end results are a safe and wholesome product. This document will broadly guide you to the development of your HACCP plan.

Step One: Write down your entire process from start to finish (step-by-step). Where applicable, create a flow diagram to assist you. Make sure what you've written is exactly how you conduct the process. Name the specific final product, who will be the end user, how is the product to be stored and if the product needs further processing by the end user (such as must be fully cooked or if it is ready-to-eat.)

Step Two: Conduct a *Hazard Analysis* for each step in your process to determine if this step is identified as a *Critical Control Point (CCP)*. A CCP is a step in your process that is imperative it is done correctly to reduce or eliminate a hazard likely to occur based on your process or the commodity.

[See Appendix A - Guide to Hazards] [See Appendix B - CCP Decision Tree]

Step Three: Start the HACCP plan: Add each identified CCP which must have at least one *Critical Limit (CL)*. A CL must be measurable and if measured with an instrument or device, the device must be properly calibrated when applicable. In order words, at this CCP what must be done each time to ensure the pathogen of concern is being controlled. This process provides your CL. You may have more than one CL for a CCP.

Step Four: Each CL must be *monitored* to ensure it was done correctly. The result of the measurable item must be in writing and answer four basic questions: 1) what specifically is being measured; 2) how it is being measured; 3) how often it is being measured; and 4) who is doing the measuring.

Step Five: It is imperative to know what to do in advance if a CL is not met. Therefore, for each CL you must list what *Corrective Actions* will be taken to address the CL not being met. The action that was taken to correct the deviation from the CL is to be recorded. There may be more than one *corrective action* option.



Step Six: At a set frequency, the monitoring records conducted for each CL must be *verified in writing* showing the proper limits were met at each CCP. Someone other than the person recording the CLs must *verify* all the records associated with each CCP were done properly and the proper corrective actions were taken, etc. *Verification* includes review of calibration records and at least an annual review of the HACCP plan as well.

Step Seven: *Recordkeeping* is a list of all monitoring records that will be needed and maintained for each CCP. Records could include: temperature logs (cooking/cooling/storage, etc.); pH measurements; calibration logs of all measuring devices; water activity logs; dehydration logs; relative humidity logs; corrective action logs; labeling logs; and any other logs kept as part of the process.

[See Sample HACCP plan – Appendix C]

Final Step: Make sure you date and sign your final plan.

For more in-depth information on developing a HACCP plan please access the following link:
https://edis.ifas.ufl.edu/topic_haccp

Please submit questions, required materials and, if necessary, a completed SPA application to:
RetailHACCPspa@FDACS.gov



Appendix A – GUIDE TO HAZARDS
Common Pathogens of Concern
(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 Parahemolyticus, Anisakis, Listeria Monocytogenes, Clostridium Botulinum

Meat: Salmonella, Listeria Monocytogenes, Bacillus Cereus, Clostridium Perfringens, Escherichia Coli O157:H7, Staphylococcus Aureus

Pork: Clostridium Perfringens, Trichinella, Salmonella, Listeria Monocytogenes, Bacillus Cereus, Staphylococcus Aureus

Poultry: Clostridium Perfringens, Staphylococcus Aureus, Salmonella, Campylobacter Jejuni, Escherichia Coli O157:H7, Listeria Monocytogenes, Clostridium Botulinum

Produce: Clostridium Perfringens, Bacillus Cereus, Listeria Monocytogenes, Shigella Spp., Clostridium Botulinum

Ready-To-Eat Foods: Staphylococcus Aureus, Listeria Monocytogenes, Shigella Spp., Salmonella, Bacillus Cereus, Clostridium Botulinum

Rice: Bacillus Cereus

Shellfish: Vibrio Parahemolyticus, Vibrio Vulnificus, Vibrio Cholerae, Yersinia Spp., Clostridium Botulinum

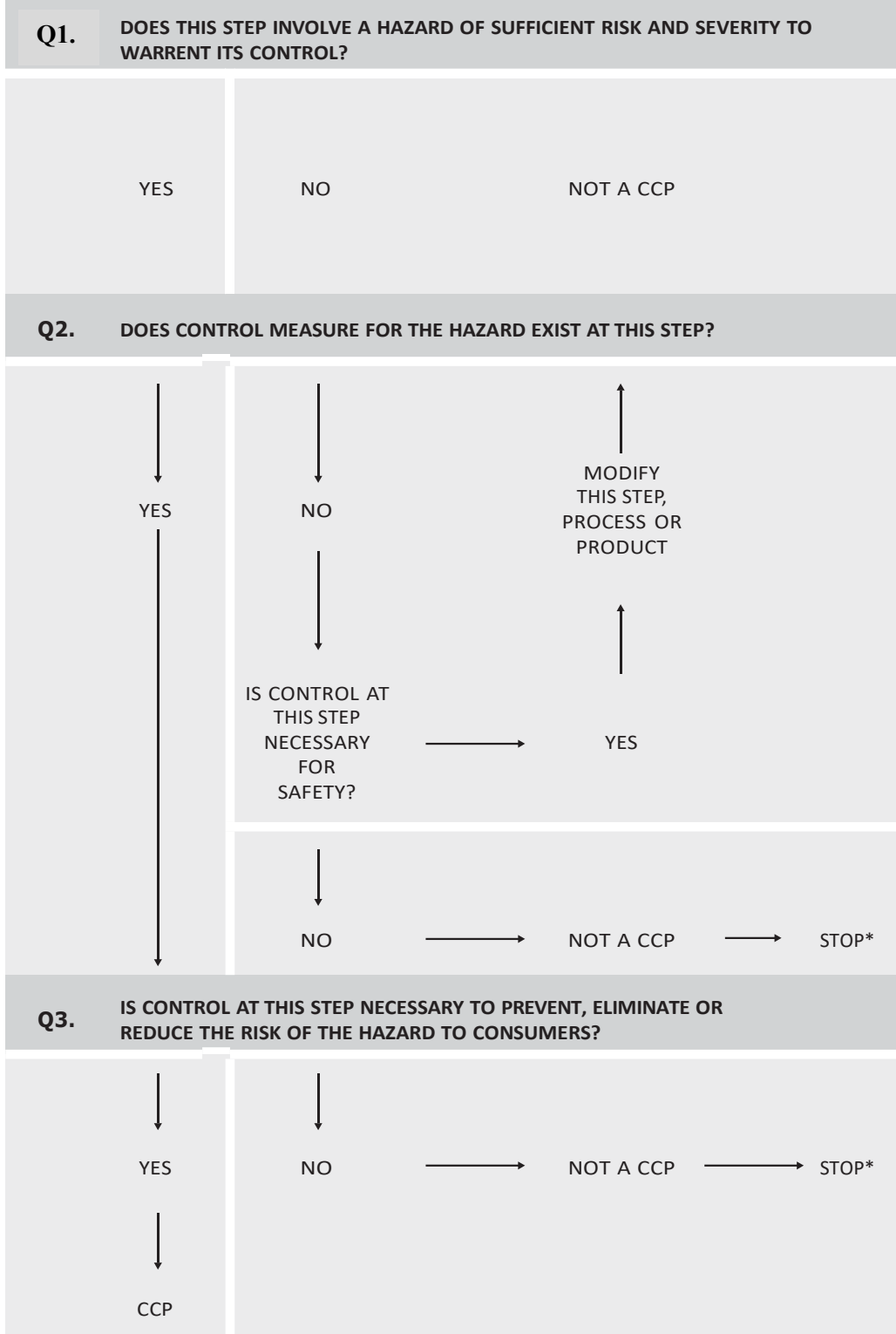
Water: Campylobacter Jejuni, Shigella Spp., Listeria Monocytogenes, Cyclospora Cayetanensis, Cryptosporidium Parvum, Giardia Duodenalis

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/FoodborneIllnessContaminants/CausesOfIllnessBadBugBook/>





This decision tree is derived from one that was developed by the National Advisory Committee on Microbiological Criteria for Foods.

Appendix C – Sample HACCP Plan

HACCP Plan Form

Firm Name: Florida Taste Time Firm Address: 7721 Sunny Side Lane; Sunshine Always, Florida 32399						Product Description: Acidified White Rice Method of Storage and Distribution: Room Temperature Intended Use and Consumer: Assembled with other foods, packaged, then refrigerated, for general public. Ready to Eat.			
(1) Critical Control Point	(2) Significant Hazards	(3) Critical Limits for each Preventive Measure	Monitoring				(8) Corrective Actions	(9) Verification	(10) Records
			(4) What	(5) How	(6) Frequency	(7) Who			
Acidification	Bacillus cereus	Initial pH of less than 4.2	pH of Acidified Rice within 30 minutes of acidification	Properly calibrated pH meter	Every batch	Processing staff	Add additional seasoned vinegar until pH is less than 4.2 Unable to lower vinegar to less than 4.2; discard product Review procedures to determine if there is a system error in the plan	All records will be verified weekly by a shift manager	pH log pH calibration log corrective action log
Room Temperature Storage	Bacillus cereus	Maximum time at room temperature is 10 hours	Time rice was acidified Time rice was discarded	Record time, visually from clock	Every batch	Processing staff	Once 10 hours has passed rice must be discarded. Any product made after the 10 hour maximum is to be discarded Review procedures	All records will be verified weekly by a shift manager	Time acidified/Time discarded log Corrective action log
Signature of Company Official: Lucille McGillicuddy						Date: April 1, 2017		Page 5 of 5	