Sea Grant
NEW YORK

Seafood Guide 3

Seafood HACCP

In 1997 the Federal Government enacted the Seafood HACCP regulation, which required entities processing fish and fishery products to implement a preventive food safety plan known as a HACCP plan.

HACCP stands for Hazard Analysis and Critical Control Points.

The HACCP regulation applies to all those working with fish and fishery products. In order to understand who must be in compliance with this regulation it is important to understand how FDA defines Fish and Fishery Products.

Definitions

Fish means fresh or saltwater finfish, crustaceans, other forms of aquatic animal life (including, but not limited to, alligator, frog, aquatic turtle, jellyfish, sea cucumber, and sea urchin and the roe of such animals) other than birds or mammals, and all mollusks, where such animal life is intended for human consumption.

Fishery Product means any food product meant for human consumption in which fish is a characterizing ingredient (i.e. fish sauce, oyster sauce, whitefish spread, crab salad etc.)

The HACCP Process

There are two major components to developing an effective plan for controlling seafood safety hazards. The first is to conduct a Hazard Analysis, which is meant to identify the hazards associated with your product and process and the Critical Control Points (CCP's). CCP's are the points in the process where hazards must be controlled. While a Hazard Analysis must be done it does not have to be written.

A written HACCP plan that includes the seven principles of HACCP is then developed for each CCP to prevent significant hazards within your facility.

Preliminary Steps

Before starting your Hazard Analysis and HACCP plan development you should:

Identify your HACCP team. Who will work together to develop the HACCP plan. It is best practice to include individuals representing different aspects of processing and production (i.e. managers, sanitation staff, line workers where applicable etc.)

Draft a product description(s) to ensure the team and any external reviewers are clear on what your product is, how it is received, processed and held, as well as who the product will be sold to.

Draft a process flow chart depicting how a product flows through your facility. This should include ALL processing steps and a narrative describing what happens at each step of the process.

HACCP Training

The Seafood HACCP Alliance (Alliance), led by the Association of Food and Drug Officials (AFDO), manages a standardized curriculum recognized by US regulatory agencies. On average the training takes 16-20 hours and costs between $150 and $700 per person. The AFDO training is available in two formats, 1) Three day in person basic course or 2) Segment One online course coupled with a one day live Segment Two course. Additional course information can be found on the AFDO website (afdo.org). While HACCP training is required, the Seafood HACCP alliance training itself is not, other training options are available.

New York Sea Grant provides Seafood HACCP training and guidance.

New York Sea Grant SEAFOOD HACCP Training Program

There are 7 Principles of a HACCP plan which must be implemented to be considered in compliance with current Seafood HACCP requirements.

Conducting a Hazard Analysis

Principle 1: Hazard Analysis: Use the fish and fishery products hazards and controls guidance (Hazards Guide) or other scientific references/resources to identify hazards associated with specific products and processes. The hazards guide also contains information on determining whether a hazard is significant and what can be done to control it. While conducting a hazard analysis you will answer two questions for each processing step and each hazard identified to determine where in your process a control is necessary to prevent the hazard.

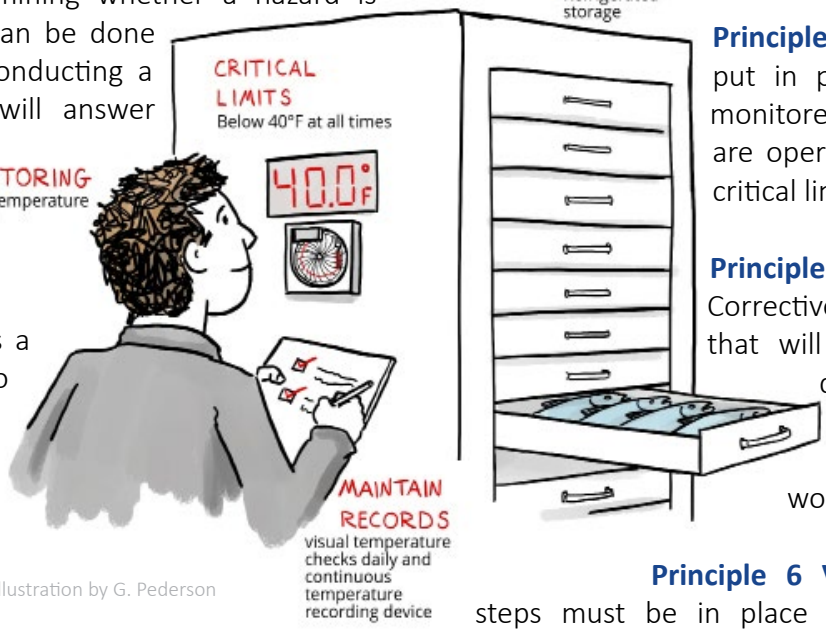

Illustration by G. Pederson

Question 1: Is the potential food safety hazard significant? and justify your answer.

Question 2: What control measures can be applied to prevent it?

If the answer to both of the above questions is yes for any hazard at any processing step then it is a CCP and a HACCP plan is necessary.

Depending on the complexity of your process and the species you are working with, there may not be any hazards to control. If no critical control points are identified after conducting a Hazard Analysis, then no HACCP plan is required.

Developing a HACCP Plan

Principle 2 CCP's: Critical Control Points or CCP's are points during processing where a hazard is identified as significant and a control is necessary to prevent it. CCP's are identified in the hazard analysis.

Principle 3 Critical Limits: Each CCP must have critical limits set to indicate the maximum or minimum value for the biological, chemical, or physical parameter that will prevent or control the hazard.

Principle 4 Monitoring: Controls put in place must be regularly monitored to ensure that they are operating within the defined critical limits.

Principle 5 Corrective Actions: Corrective actions are steps that will be taken if there are deviations from critical limits to ensure the food is safe and the process is working.

Principle 6 Verification: Verification steps must be in place to ensure the controls are effectively controlling significant hazards and protecting the food.

Principle 7 Recordkeeping: Records of on-going monitoring efforts, corrective actions, and verification procedures must be maintained. These records must be retained for 1 year (fresh fish) or two years (frozen fish). Records help regulators ensure HACCP plans are properly implemented and effectively control significant food safety hazards.

This publication was developed by Michael Ciaramella MSc, PhD (mc2544@cornell.edu) to support the NY seafood industry as a result of project A/EEP-52 funded under award NA20OAR4170487 from the National Sea Grant College Program.

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