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What's Required to Process Seafood - A briefing of Requirements

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What's Required to Process Seafood – a Briefing of Requirements

Cindy Borgwordt

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Ensuring Public Safety is Our Job

What is HACCP? Hazard Analysis and Critical Control Point

- ▶ Internationally recognized food safety and management system PLAN
- ▶ Customized for each facility and product
- ▶ Hazards that are “**reasonably likely to occur**” can be from raw materials, handling, procurement, distribution and consumption of the product
- ▶ Food Safety Modernization Act has had a **major impact**



Food Safety Modernization Act



The Food Safety Modernization Act (FSMA)

- ➡ law by President Barack Obama Jan 4, 2011.
- ➡ FDA new authorities to regulate the way foods are grown, harvested and processed.
- ➡ FDA to better protect public health strengthening the food safety system.
- ➡ Treats food in a controlled and managed way

Association of Food and Drug Officials (AFDO)



- ▶ Seafood HACCP Alliance (SHA) Committee:
 - Federal and State Authorities for Seafood
 - Academic Experts and Publication Office
 - Industry Representatives and Partner Program
- ▶ Maintains a uniform and standard training format – globally
- ▶ The plan requires author be certified in HACCP



SHA Training and Educational Opportunities



- ▶ HACCP:

- Workshops

Certificates for course completion

Hybrid and in person courses

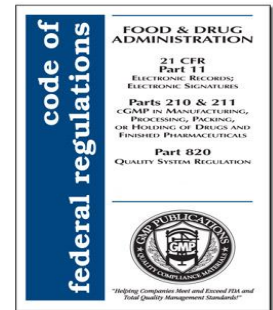
- ▶ SCP: Sanitation Control Procedures for Processing Fish and Fishery Products

- Not required by FDA but **HIGHLY RECOMMENDED**

- ▶ Train-the Trainer (TTT) Courses

Be cognizant of laws, rules and more rules – many apply!

- ▶ **FMSA Food Safety Management Act**
 - changes from treatment to prevention
- ▶ **State Food Code**
- ▶ **FCR – Federal Code of Regulations**
 - Seafood HACCP Regulation 21 CFR 123
 - Control of Communicable Disease 21 CFR 1240
- ▶ **FDA – Federal Department of Agriculture**
- ▶ **Not in HACPP but required:**
 - Sanitation controls
 - Corrective action and verification records
 - GMP
 - Transportation
 - Your product may have additional regulations (dairy, low acid, etc.)



First – Make a flow chart of the process

- ▶ Example
- ▶ Receive product ->
cooler ->
head/eviserate ->
package ->
label ->
transport to end user

Each change requires new HACCP – get it right the first time!

Get Ready for the 7 Principles

1. Conduct hazard analysis
2. Determine critical control points (CCP)
3. Establish: critical limits
4. :monitoring procedures
5. :corrective actions
6. :verification procedures
7. :record-keeping and documentation procedures



1. The analysis:

What could go wrong

- ▶ Identify the hazards
- ▶ Determine which are significant
- ▶ Plan how to control them
- ▶ Example: product is hand filleted
 - Possible that metal enters product from broken or defective fillet knives
 - Control by inspecting knives regularly – very clearly define how to control



Examples of hazards include:

- ▶ Foreign material contamination (dust)
- ▶ Mislabeling product (allergens)
- ▶ Monitoring failure
- ▶ Wrong cooking temperature
- ▶ Unsanitary conditions (pests)



Use The “Guide” – obtained in certified FDA training or purchase

- ▶ Document which guides all possibilities, must follow
- ▶ Lists hazards:
 - by species
 - by final product
 - by hazard
 - by process



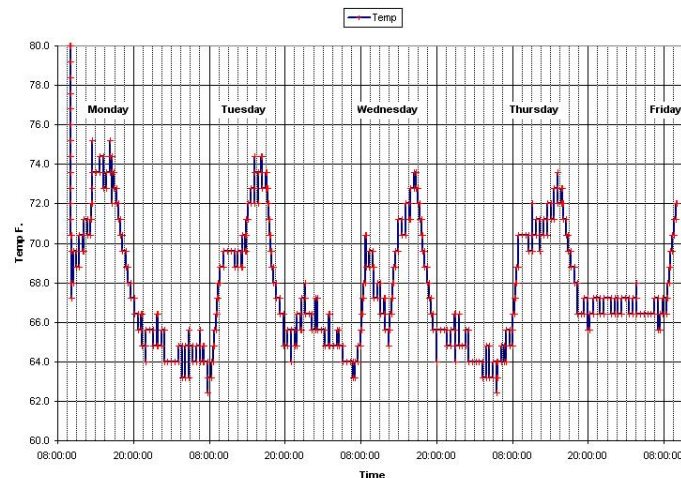
2. Establish Critical Control Points

- ▶ The most important steps **where** the hazard can be controlled, reduced or eliminated to an “acceptable” level.
- ▶ Example: the fillet knives can be inspected **before** and **after** the fillet process of a “lot,” say each 50 fish



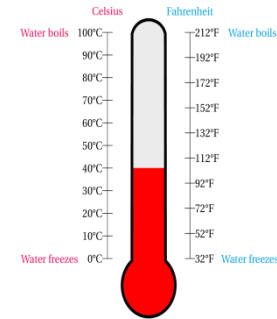
3. Establish a critical limit

- ▶ Safety limit which separates “acceptable” from “unacceptable”
- ▶ Often time and temperature combined
- ▶ Example: temp recording device in cooler, if records above accepted temp – REJECT!



4. Establish Monitoring Procedures

- ▶ Steps to ensure the hazard or process is under control and monitored.
- ▶ Visually checking product or mechanically monitor when
- ▶ Take temp when
- ▶ MUST have written records



5. Establish Corrective Action

- ▶ Make a list detailing actions to fix it
- ▶ Reject?
- ▶ Destroy?
- ▶ Repair equipment?
- ▶ Recook?
- ▶ May divert rejected product to non-human consumption but can't sell it then
- ▶ Must document that the corrective action occurred, must be able to show you did what was needed for food to be safe!



6. Establish Verification of your HACCP



- ▶ *Prove* that the HACCP is working.
- ▶ Daily checks of records – processing logs, equipment calibration, data logs – lots of records out of limit then it is not working
- ▶ Calibrate equipment – it accurate?
- ▶ Review customer, carrier complaint records – note patterns.

7. Establish Documentation

- ▶ *Record everything:* logs for production, inspections, sanitation, calibrations, pest control, staff training and non-conformance
Maintain records for 3 years
- ▶ Refrigeration 1 year, frozen 3 years
- ▶ Records must be available for inspection, keep organized, FDA mandated by FSMA to increase inspections frequently.
- ▶ No documentation? Result: Recall, reject, suspension???

YES!



NO



For a new, small scale facility:

- ▶ Determine your process then determine the equipment needed for this process.
- ▶ Let the equipment dictate the design, not the reverse.
- ▶ Tour as many facilities as you can, ask ?'s
- ▶ Take the HACCP training, fees vary widely
- ▶ Establish your market, no market, no product!



The facility – just a few requirements – “must haves”

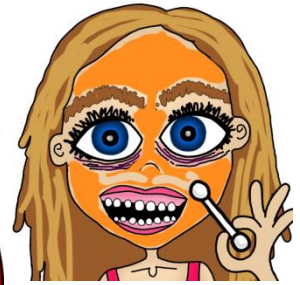


- ▶ Impermeable floor, wall, ceiling, floor w/center floor drain
- ▶ 3 bay sink (wash, rinse and sanitize at 170°F)
- ▶ Mop sink (not in processing area)
- ▶ Hand sink (w/towels, trash, soap)
- ▶ Limited access to raw product and processing (ie. Dedicated room w/no other purpose)
- ▶ Bathroom in separate room away from processing
- ▶ Grounds kept clean: no pests, uncut grass, equipment, etc.



Your staff MUST.....

- ▶ Perform consistently
- ▶ Report problems immediately
- ▶ Have training
- ▶ Be clean (clothing, hair, body) AND healthy
- ▶ Understand bacteria and diseases they cause
- ▶ Abide by health codes
- ▶ Must have staff that is HACCP certified write the HACCP plan



Must label your product

- ▶ Name of product, a list of ingredients, a use-by or best before date, storage conditions, cooking instructions and the name and address of the manufacturer or packer.
- ▶ Possibly nutrition, country of origin, and health claims.
- ▶ Label should be durable
- ▶ Include allergens – can kill someone!
- ▶ Labels must contain a truthful and clear description of the product ingredients, an accurate weight of the product, and safe handling instructions.



Determine what your “Lot” will be – limits amount of recall

- ▶ Label code blocks of processed products as an aid for tracing back potentially hazardous product.
- ▶ Determine a lot number and make a record of it.
- ▶ Match lots to any correction actions for easy reference



And then some more plans..... these all are to be included.....

- ▶ Good Manufacturing Practices (GMPs),
- ▶ Standard Operating Procedures (SOPs),
- ▶ Sanitation Standard Operating Procedures (SSOPs)
- ▶ Transport Procedures
- ▶ Training for staff



Sanitation CFR part 416

- ▶ Must develop, implement and maintain written Sanitation Standard Operating Procedures (SSOP)
- ▶ Describe all procedures and daily inspections before and during operations to prevent contamination or adulteration
- ▶ How, when and who gets things done and recorded



Example of a few SSOP

- ▶ Wash/sanitize hands (bathroom)
- ▶ Sanitize hands in the processing area.
- ▶ No sick workers.
- ▶ Facial hair must be covered with beard net (snood)
- ▶ Maintain records, record everything.



NO



Waste Disposal must meet regulations

▶ Offal – solid waste

- Landfill, compost, burial, incineration, recycle
- If fed to agricultural animals can't sell that animal unless offal is tested and approved for human consumption

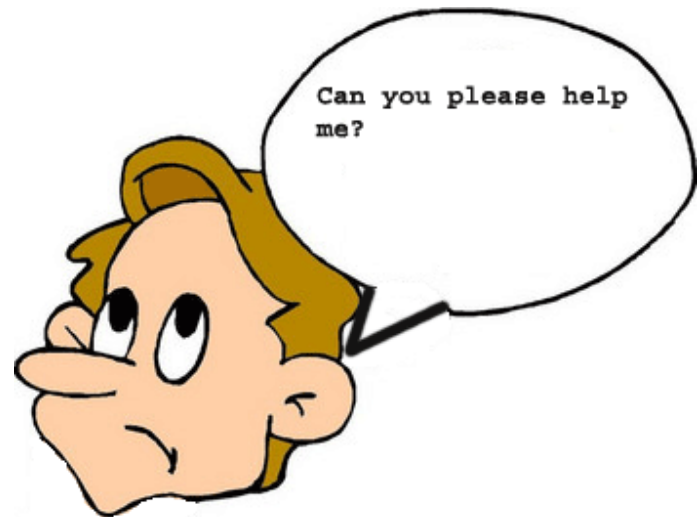
Liquid waste – septic or sealed tanks

▶ All disposal methods must be in accordance with state and local laws



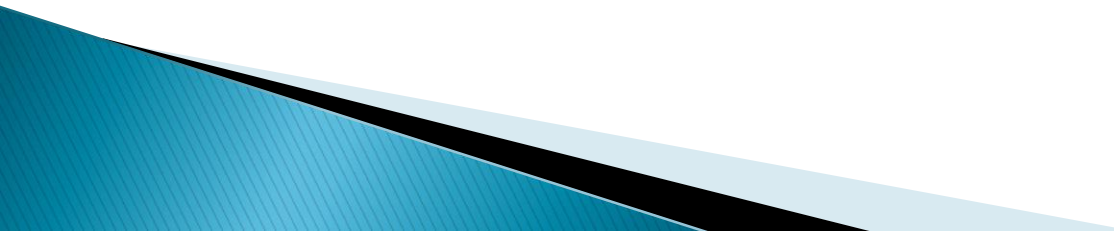
Resources – learn as much as you can!

- ▶ HACCP Training Manual – comes with course
- ▶ Fish and Fishery Products Hazards and Control “Guide” – with Course
- ▶ HACCP Video series, FDA, very good
- ▶ AFDO – Association of Food and Drug
Seafood HACCP Alliance
- ▶ FDA Hazards Guide
- ▶ Many private companies




What's in it for me?

Effects of the HACCP Plan

- Improve your operation from the regulatory standpoint and provide for the safety of your food products
 - Reduce the chance for food-borne illness
 - Identify and document where corrections need to be made
 - Have you thoroughly review your operation specifically for food safety and place controls on those areas of concern
- 

What do you do with your HACCP?

- ▶ Must be signed and dated, also each time modified
 - ▶ Kept by most responsible trained person on site, select one person to work with the inspector
 - ▶ Submit to local health department (county)
 - ▶ Sometimes city specific codes
 - ▶ Can be under federal jurisdiction
 - ▶ All employees should be familiar with it
 - ▶ Manager knows it in and out
- 

The End

▶ Thank you!

- ▶ Training provided by Lincoln University Title III
- ▶ NCRAC/MOAA conference attendance supported by Dr. Wetzel, Principle Investigator Aquaculture, Lincoln University



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