Principle 5:
Establishing Corrective Actions

Chapter 12 Corrective Actions
HACCP A Systematic Approach to Food Safety

OFFICE OF THE TEXAS STATE CHEMIST
Texas Feed and Fertilizer Control Service • Agriculture Analytical Service

AgriLife Research

HACCP Principles

1. Conduct a Hazard Analysis (HA)
2. Identify Critical Control Points (CCPs)
3. Establish Critical Limits (CLs)
4. Establish CCP Monitoring Requirements
5. **Establish Corrective Actions (CA)**
6. Establish Verification Procedures
7. Establish Record-Keeping Procedures

HACCP Principle 5:
Establish Corrective Actions

Definition of Corrective Action-Procedures followed when a deviation occurs (NACMCF)

Definition of Deviation- Failure to meet a critical limit (NACMCF)

Corrective Action According to FSMA

§507.42

(a) As appropriate to the nature of the hazard and nature of preventive control,

(1) Establish and implement written corrective action procedures taken if preventive controls are not properly implemented

(i)presence of a pathogen or appropriate indicator organism

(ii) Presence of an environmental pathogen through monitoring

(2) Corrective action procedures must describe the steps to be taken to ensure that (i) appropriate action is taken to identify and correct, (ii) reduce likelihood of re-occurance (iii) all affected feed is evaluate for safety (iv) prevented from entering commerce

Corrective Action FSMA cont.

If preventive controls is not properly implemented and a corrective action procedure has not been established, or the whole food safety plan is found to be ineffective, or appropriate decisions were not made you must:

(i) Take action to identify and correct the problem

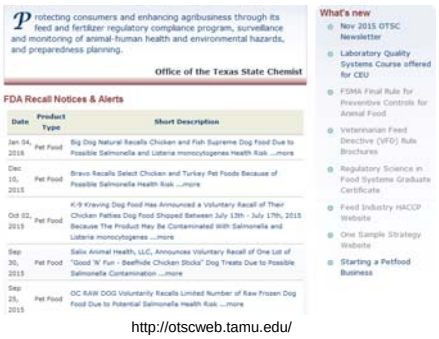
(ii) Reduce the likelihood that the problem will recur

(iii) Evaluate all affected animal feed

(iv) Prevent affected feed from entering commerce

(v) Reanalyze the food safety plan

Corrective Actions: Problems Occur



http://otscweb.tamu.edu/

Corrective Actions for Each CCP

"Due to the diversities in possible deviations, corrective actions must be developed for each CCP when they are identified and the CL(s) and monitoring parameters are set."

Corrective Actions - Options

Appropriate corrective actions must be taken whenever a critical limit is violated and include the following three options:

Option 1 for Implementing a CA

Immediately adjust the process and keep the product in compliance within the set criteria. In this case the corrective action is immediate, and no product is placed on hold because there has been no deviation.

Option 2 for Implementing a CA

Stop the line.
Hold all product not in compliance and evaluate. Determination of subsequent disposition based on evaluation results.

Option 3 for Implementing a CA

If the deviation is the result of a problem in line design or equipment malfunction, a quick fix may be applied in order to continue running, but a long term solution must be sought.

- Non-compliant product must be placed on hold.
- The re-evaluation process also becomes part of the HACCP program as the system evolves.
- The system may be changed if warranted.

Adjusting the Process

- An operator can intercede and can take corrective action through the decision process outlined in the HACCP program
- Some product may not be able to be saved, other product may be salvaged
- A corrective action should be designed into the product line and the HACCP system

Examples of Commonly Adjusted Factors to Maintain Control:

- Time
- Temperature
- Pressure of Steam
- Personnel practices
- Ingredient concentration
- Flow rate
- pH
- Moisture
- Bulk Density
- Rework

Elements of Corrective Action

1. Determine and correct cause of non-compliance
2. Determine disposition of non-compliant product
3. Record CA's that have been taken

NACMCF (1998)

Also:

Who is responsible for initiating corrective action, the records that must be maintained, and who is responsible for oversight

Questions asked for product held during CA

1) What tests can be made to verify the safety of the product in question?
2) Does review of the data indicate the safety of the product is in serious question?
3) Can this product be diverted for use in another product where safety is assured?
4) Can the product be reprocessed or reworked to assure food safety?
5) If product cannot be reused, how to discard or destroy?
6) What forms to complete and records to keep?

Corrective Action Records

All CA must be documented

Records for deviations and CA should include:

- Production records, actual or reference to products involved in deviation
- Standard form
- Recommendation regarding product disposition
- Accurate accounting of all product involved
- Records required by regulatory authority

Corrective Action Standard Form

- Hold number
- Description of deviation
- Quantity of bags or tons held
- Date product was placed on hold
- Production date and code of product held
- Disposition and/or release forms
- Name of responsible individual

Responsibility for Decision Making

- Responsibility for decision making needs to be clearly delineated early on in the assignment of monitoring responsibilities.
- An individual knowledgeable in CCP control must have the authority to make quick decisions on the production floor.
- The individual responsible for the action must record on the CCP data sheet what action was taken and by whom.

Identifying Critical Limits, Monitoring and Corrective Actions

Product Name: Cattle protein/mineral medicated supplement

Process/Step CCP	Critical Limit	Monitoring Procedures	Corrective Action
Bulk Receiving CCP1	Zero tolerance	**What will be measures?** *Cleanout certificate for carrier* *Bill of Lading from Supplier* *Letter of Guarantee (LOG)* *Approved supplier* *Presence of prohibited animal protein* **Where will the CL be measured?** *Bulk receiving area* **How will the CL be measured?** *Visual observation of documentation and carrier for contamination* *Purchase only from approved Supplier* **Who will monitor the CL?** *Receiving employee* **How often will the CL be measured?** *Every load*	**Cause of deviation?** *No cleanout certificate* *No LOG* *Unapproved supplier* *Visual presence of contamination* **How will the process be corrected?** *Require proper paperwork* *Reject is load is contaminated and report to state* **Product Disposition?** *If rejected, return to supplier or handled by regulatory official* **Measure to prevent recurrence?** *retaining* **Who is responsible for implementing the CA?** *Receiving supervisor*