

CORRECTIVE ACTIONS

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***PRINCIPLE 5: ESTABLISH
CORRECTIVE ACTIONS***

HACCP PLAN FORM – CORRECTIVE ACTIONS

1. CCP	2. Hazards	3. Critical limits	Monitoring				8. Corrective actions	9. Verification
			4. What	5. How	6. Frequency	7. Who		

DEFINITIONS

CODEX ALIMENTARIUS

- ***CORRECTIVE ACTION***
 - ***ANY ACTION TO BE TAKEN WHEN THE RESULTS OF MONITORING AT THE CCP INDICATE LOSS OF CONTROL.***
 - ***MUST ENSURE THAT THE CCP HAS BEEN BROUGHT UNDER CONTROL.***
 - ***MUST INCLUDE PROPER DISPOSITION OF AFFECTED PRODUCT***
 - ***MUST BE DOCUMENTED***

FDA HACCP REGULATIONS

- ***WHENEVER A DEVIATION FROM A CL OCCURS, A PROCESSOR SHALL TAKE CORRECTIVE ACTIONS EITHER BY:***
 - ***FOLLOWING A CORRECTIVE ACTION PLAN THAT IS APPROPRIATE FOR THE PARTICULAR DEVIATION, OR***
 - ***FOLLOWING PROCEDURES SET FORTH (UNDER THE REGULATION)***
 - ***WHEN NO PLAN EXISTS***

USDA/FSIS HACCP REGULATIONS

- ***CORRECTIVE ACTIONS***
 - ***PROCEDURES TO BE FOLLOWED WHEN A DEVIATION OCCURS***

NACMCF – CORRECTIVE ACTION SHOULD

- **DETERMINE AND CORRECT THE CAUSE OF NON-COMPLIANCE;**
- **DETERMINE THE DISPOSITION OF PRODUCT;**
- **RECORD THE CORRECTIVE ACTION THAT HAS BEEN TAKEN;**
- **SPECIFY WHO IS RESPONSIBLE**
 - **FOR THE CORRECTIVE ACTION, AND**
 - **FOR THE OVERSIGHT**

DEVIATION

- **DEFINED (CODEX)**
 - **FAILURE TO MEET A CL**
- **INDICATES THAT A POSSIBLE FOOD SAFETY HAZARD MAY HAVE OCCURRED**
- **REQUIRES IMMEDIATE CORRECTIVE ACTION(S) TO BE TAKEN**
- **SHOULD TRIGGER AUTOMATIC REVIEW OF THE HACCP PLAN**

CORRECTIVE ACTION IS NEEDED

- **FOR EVERY DEVIATION FROM A CL AT A CCP**
 - **BY DEFINITION, A POTENTIAL HAZARD EXISTS**

CORRECTIVE ACTIONS ARE SPECIFIC

- **TO EACH CCP**
- **TO EACH DEVIATION**

CORRECTIVE ACTIONS ARE IMMEDIATE

- **TIME FACTORS**
 - **DEPENDS ON MONITORING FREQUENCY**
 - **ALL PRODUCTS WITHIN THE MONITORING TIME PERIOD MUST BE BROUGHT UNDER CONTROL**
 - **HOLDING/STORAGE PROVISIONS FOR PENDING PRODUCT**

CORRECTIVE ACTIONS MUST BE DOCUMENTED

- **RECORDS HELD**
 - **FOR THE TERM MANDATED BY**
 - **REGULATORY**
 - **HACCP PLAN**

INDICATORS THAT CORRECTIVE ACTIONS ARE IMMINENT

- **EVALUATION OF TRENDS**
 - **OPERATING LIMITS EXCEEDED FREQUENTLY?**
 - **HITTING EVERY LIGHT AS IT TURNS RED**
 - **NOTE: GAINESVILLE INTERPRETATION = 30 SECONDS
AFTER IT TURNS RED**

GOALS OF CORRECTIVE ACTIONS

- **TO CORRECT AND ELIMINATE THE CAUSE OF THE DEVIATION**
 - **AND RESTORE PROCESS CONTROL**
 - **SHORT TERM AND LONG TERM COMPONENTS**
- **MAINTAIN ACCURATE RECORD**
- **IDENTIFY PRODUCT AND DETERMINE DISPOSITION**

SEQUENCE OF CORRECTIVE ACTIONS

- **STOP THE LINE OR PROCESS**
- **ADJUST PROCESS TO BRING CCP BACK UNDER CONTROL**
- **RECORD ACTION TAKEN**
- **INFORM INSPECTOR (IF REQUIRED)**
- **PRODUCT DISPOSITION**
 - **ALL SUSPECT PRODUCT PUT ON HOLD**
 - **CONSULT WITH HACCP TEAM (& OTHERS)**
 - **TEST PRODUCT?**
 - **WHERE APPROPRIATE**
- **CONDUCT A PRODUCT DISPOSITION ANALYSIS**

PRODUCT DISPOSITION ANALYSIS

- **DETERMINE IF PRODUCT PRESENTS A SAFETY HAZARD**
 - EXPERT EVALUATION
 - TESTING?
- **IF NO HAZARD EXISTS**
 - RELEASE PRODUCT “AS IS”
 - DOWNGRADE & RELEASE
- **IF POTENTIAL HAZARD**
 - CAN IT BE REWORKED?
 - RECOOKED, REPACKAGED, RECONDITIONED, ETC.
 - DIVERTED FOR SAFE USE?
 - RELEASE FOR ANIMAL FEED
 - DENATURE FOR RENDERING
 - OTHER
 - DESTROYED?

ADJUSTING THE PROCESS?

AUTOMATED SITUATIONS

- **ADJUST FLOW DIVERSION VALVE ON A PASTEURIZER**
- **ADJUST TEMPERATURE SETTING ON COOKERS**
- **ADJUST METAL DETECTOR**

NON-AUTOMATED OR MANUAL SITUATIONS

- **DEFINED FREQUENCY**
- **DELEGATED AUTHORITY TO MAKE ADJUSTMENTS**
- **EXAMPLES**
 - **BATCH COOKERS**
 - **ADJUST TEMPERATURE SETTING**
 - **MANUAL pH ADJUSTMENT ON BRINES**

QUESTIONS FOR THE HACCP TEAM

- **WHAT PROCESS ADJUSTMENTS CAN BE MADE?**
- **WHAT TESTS CAN BE MADE TO VERIFY THE SAFETY OF PRODUCT(S) IN QUESTION?**
- **DOES THE REVIEW OF DATA INDICATE THAT PRODUCT SAFETY IS IN SERIOUS QUESTION?**
- **CAN THE PRODUCT BE DIVERTED FOR USE IN ANOTHER PRODUCT?**
 - **WHAT ARE RISKS?**
- **CAN THE PRODUCT BE REWORKED?**
- **IF THE PRODUCT CANNOT BE REUSED, WHAT METHOD SHOULD BE USED FOR DISCARDING AND DESTROYING IT?**
 - **BURY IT?**
 - **INCINERATE IT?**
 - **ENVIRONMENTAL CONCERNS?**
- **WHAT FORMAT FOR RECORDS?**

***EXAMPLES OF DEVIATIONS &
CORRECTIVE ACTIONS***

EXAMPLE 1– COOKING HOT DOGS

- **DEVIATION:**
 - **INTERNAL TEMP OF HOT DOGS IS BELOW 152 F AT END OF COOKING CYCLE**
- **CORRECTIVE ACTIONS**
 - **ROLL BACK AND CONTINUE COOKING TO INTERNAL TEMP OF AT LEAST 152F**
 - **CHECK HOUSE OPERATIONAL CONTROLS & SCHEDULES AND MAKE ADJUSTMENTS NEEDED**
 - **EVALUATE SAFETY OF PRODUCT?**

EXAMPLE 2 – COOLING BEEF ROUND

- **DEVIATION**
 - INTERNAL TEMP OF BEEF ROUND DID NOT REACH 45 F
- **CORRECTIVE ACTIONS**
 - DO NOT BREAK CARCASS
 - RAIL BACK INTO COOLER & CHILL RAPIDLY TO 45 F OR BELOW
 - CHECK COOLER OPERATIONS & ALERT MAINTENANCE OF PROBLEM
 - CHECK SOPs FOR COOLER OPERATION AND CARCASS LOADING
 - EVALUATE PRODUCT SAFETY?

EXAMPLE 3 -- PASTEURIZATION

- **DEVIATION**
 - TEMPERATURE DROPS BELOW CL
- **CORRECTIVE ACTIONS**
 - DIVERT MILK FLOW UNTIL TEMPERATURE RECOVERS
 - USUALLY AUTOMATIC WITH FLOW DIVERSION VALVE
 - MAKE ADJUSTMENTS TO CORRECT
 - RESUME PRODUCTION
- **WHAT IF IT IS A BATCH PASTEURIZER?**

CORRECTIVE ACTION RECORDS – INCLUDE

- **PRODUCTION RECORDS – DETAILED**
- **STANDARDIZED FORMAT – LISTING AND INCLUDING**
 - **DEVIATION**
 - **REASON FOR HOLDING PRODUCT**
 - **AMOUNT OF PRODUCT**
 - **NUMBER OF CONTAINERS, LOT SIZE, ETC.**
 - **ACCURATE ACCOUNTING OF ALL PRODUCT INVOLVED**
 - **PRODUCT TRACKING INFORMATION**
 - **CODE**
 - **DATE**
 - **SIGNAGE BY INDIVIDUALS**
 - **RECOMMENDATIONS BY AUTHORITIES/EXPERTS (WHERE APPROPRIATE)**
- **OTHER FORMS**
 - **DISPOSITION AND RELEASE FORMS**
 - **STATEMENT OF SOPs INVOLVED**

FINAL COMMENTS

- **CORRECTIVE ACTIONS ARE THE “HEART” OF HACCP**
- **OVERALL OBJECTIVE IS CONSUMER PROTECTION**
- **ENSURE THAT NO UNSAFE PRODUCT IS MARKETED**