# Section 3-8: Principle 6: Verification Procedures









# **Section Overview**

The sixth principle of HACCP is to establish HACCP plan verification procedures. Verification procedures for HACCP plans are critical because these activities demonstrate that the written HACCP plan is able to control the appropriate hazards in the product, and that the HACCP plan is being implemented as written.

The following topics will be discussed in this section:

- Definitions and preliminary considerations
- Validation
- Verification
- Recording verification activities









# **Learning Objectives**

At the conclusion of this section, the learner will be able to:

- define "Verification" in the context of HACCP systems and describe the two critical issues that HACCP verification procedures address,
- define "Validation" in the context of HACCP systems and describe validation procedures in a HACCP system,
- list situations that require revalidation of a HACCP plan,
- discuss verification activities for prerequisite programs, critical control points and the overall HACCP plan, and
- list examples of verification records for a HACCP plan.









# **Definitions and Preliminary Considerations**

The Codex guidelines define verification as "the application of methods, procedures, tests and other evaluations, in addition to monitoring to determine compliance with the HACCP plan."

The U.S. NACMCF uses a slightly different definition of verification, describing it as "those activities, other than monitoring, that determine the validity of the HACCP plan and that the system is operating according to the plan." This definition is useful because it emphasizes the two critical aspects of verification.

- 1. Is the HACCP plan valid?
- 2. Is the system in compliance with the written HACCP plan?

These aspects will be discussed in the following sections.



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# **Validation**

Validation is defined by the Codex guidelines as "Obtaining evidence that the elements of the HACCP plan are effective."

The U.S. NACMCF definition is more detailed: "That element of verification focused on collecting and evaluating scientific and technical information to determine if the HACCP plan, when properly implemented, will effectively control the hazards."

Validation essentially is the part of HACCP plan verification that asks the question "Am I doing the right thing?"

Validation involves a scientific and technical review of the rationale behind each part of the HACCP plan from hazard analysis through each CCP verification strategy. This is conducted by the HACCP team, with assistance by additional experts as necessary.











# **Initial Validation**

<u>Initial validation</u> is conducted within the first weeks or months of implementation of the HACCP plan. During initial validation, the team should aim to achieve the following:

- assure that the plan is valid for controlling food safety hazards associated with the ingredients, process, and product, and
- verify that the plan can be implemented as written.

HACCP plan validation should include:

- a review of the hazard analysis,
- CCP determination,
- justification for critical limits, based for example on current good science and regulatory requirements, and
- determination of whether monitoring activities, corrective actions, record keeping procedures and verification activities are appropriate and adequate.

If deficiencies are noted in any of these areas, the HACCP team must revise the HACCP plan. These changes must be implemented as rapidly as is practicable









# Revalidation

Revalidation, or reassessment, also is a required element of the HACCP system. It is necessary:

- after any changes are made that could affect the hazard analysis or the HACCP plan,
- when any changes are made to the HACCP system, and
- when specifically required by regulatory authorities or private standards bodies (e.g. in the United States, the federal regulatory authorities require annual reassessments of HACCP plans).

Revalidation of the HACCP plan may also be necessary when:

- new information arises concerning the safety of a product or ingredient,
- the product or product category is linked to a foodborne disease outbreak,
- the regulatory agency issues alerts related to the product or process,
- multiple deviations from a Critical Limit occur,
- inadequate record-keeping is followed,
- recalls or product withdrawals occur, or
- consumer complaints occur.

When the reassessment is complete, the HACCP team should issue a report detailing their findings. This report must be maintained as a HACCP record.

The HACCP plan must be modified immediately if reassessment indicates the HACCP plan is no longer adequate.









# Verification

The second important element of verification procedures is to confirm that the HACCP system is being implemented according to the written plan.

This is the part of HACCP plan verification that asks the question "Am I actually doing what I say I should be doing?"

HACCP plan verification activities are designed to ensure that the HACCP plan is being implemented properly. This includes:

- Verification of prerequisite programs
- Verification of CCPs
- Verification of the HACCP plan

Verification activities can be carried out by individuals within the company, third party experts, and regulatory agencies. It is important that individuals conducting verification activities have appropriate technical expertise to perform this function.











# **Verification Activities**

#### **Verification of Prerequisite Programs:**

Verification of general prerequisite programs such as issues relating to the premises should include a periodic review of written procedures to ensure the programs are operating as planned.

Elements of prerequisite programs that are incorporated into the HACCP plan (e.g. calibration of monitoring devices) should be included as a verification procedure.

#### **Verification of Critical Control Points:**

Primary verification activities for CCPs should include:

- calibration of processing and monitoring instruments,
- review of calibration records,
- review of monitoring records and corrective action reports,
- independent check on the adequacy of the CCP to control the identified hazard, if possible,
   and
- targeted sampling and testing.

Calibrations should be performed on equipment and instruments used in monitoring or verification at a pre-determined frequency sufficient to ensure accuracy of measurements. Calibrations should be conducted by checking the accuracy of each measuring device against a recognized standard at or near the condition that the instrument or equipment will be used.









# **Verification Activities**

#### Verification of the HACCP Plan:

Verification of the HACCP plan should focus on ensuring that the implementation of the HACCP plan complies with the written HACCP plan. The goal at this stage is to check for compliance with the written HACCP plan, not its validity (the latter is conducted during HACCP plan validation).

HACCP plan verification activities can include an on-site audit and review of HACCP records. This verification should focus on confirming that:

- the product description and flow diagram are accurate,
- critical control points are monitored as required by the HACCP plan,
- processes are operating within established critical limits,
- records are completed accurately, at the time intervals required, and reviewed appropriately,
- consumer complaints are reviewed and appropriate action taken,
- monitoring activities have been performed at the locations specified in the HACCP plan,
- monitoring activities have been performed at the frequencies specified in the HACCP plan,
- corrective actions have been performed whenever monitoring indicated deviation from critical limits, and
- equipment has been calibrated at the frequencies specified in the HACCP plan.









# **External Verification**

External verification may be conducted by a regulatory authority, your customers, private consultants, or certification bodies. Verification procedures by a regulatory agency or external auditing body may include:

- review of the hazard analysis, the HACCP plan, and any modifications,
- review of CCP monitoring records,
- review of corrective action records,
- review of the verification records,
- visual inspection of operations to determine if the HACCP plan is followed and records are properly maintained, and
- random sample collection and analysis.

Auditing procedures at CCPs in the process are particularly important and should include:

- confirming the nature of the operation,
- confirming the operator's knowledge of the CCP, the CL(s), and the monitoring and record-keeping activities required by the HACCP plan,
- confirming the operator's knowledge of actions to take in the case of a deviation, and
- observation of the operator performing activities.









# **Recording Verification Activities**

Verification activities for the HACCP system must be documented. Examples of verification records include the following:

- Records documenting the accuracy and completeness of the written HACCP plan
- Records demonstrating that the written HACCP plan is being effectively implemented
- Results of verification audits conducted by the HACCP team and by external agencies
- Reports summarizing HACCP plan reassessment activities
- Equipment testing and evaluation
- Calibration records for monitoring equipment



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