

## **THE IMPLEMENTATION OF THE INTEGRATED QUALITY AND FOOD SAFETY MANAGEMENT SYSTEM IN THE FOOD INDUSTRY UNITS**

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### **Summary**

Any organization that wants to function successfully must be coordinated and controlled in a systematic and transparent way. Success can be achieved by implementing and maintaining of a management system designed for continuous improvement of performance, that takes into consideration the necessities and wishes of every interested part, of the organization as well as of their clients'.

**Key words:** safety, quality, implementation, certification.

The applying of the HACCP food safety management system is compatible with the implementation of a Quality management system by which it is demonstrated that in the unit where it is applied there are obtained products of constant quality, unvariable in time.

In order to give credibility to the functioning of the integrated quality and food safety management system, the organizations can undergo a process of certification by accredited organisms. For the certification, all units in the food industry document and implement an integrated quality and food safety management system, realised in conformity with the Refferentials: SR EN ISO 9001:2001 – Quality management systems- requirements, respectively SR EN ISO 22000:2005 – Food Safety Systems.

The present legislative frame includes new regulations regarding hygiene rules, in context of the harmonization of Romanian legislation with the one of European Union in the sanitary-veterinary field. This way, the operators that activate in the food industry field must comply the stipulations of the H.G. no 924/ 11<sup>th</sup> August 2005 regarding approving General Rules for Hygiene of food products.

By means of this normative, the Romanian legislation approaches the necessity of applying proper programs in order to obtain safe foods for all consumers type, from children to old persons, in convalescence or with immunitary deficiencies and, also, dictates the implementation of a system of assuring the inequity of food products, system which is known as H.ACCP

Implementation of HACCP system is compatible with implementation of a quality management system by which it is demonstrated that in the unit in which is applied, there are obtained products of constant quality, invariable in time, fact that

led to the appearance of a general tendency of integrated implementation of the two systems in the food industry.

### **Material and methods**

Implementing the HACCP food safety management system is useful for practice reasons, because this way the producers can control the products during the entire technological flow until the obtaining of final products, having the possibility of always offering safe products to the consumers. In addition, the HACCP system brings also other advantages to the units in which are implemented:

- Assures the conformity with legal requirements;
- Reduces loss of managing competence by concrete establishing of responsibilities;
- Reduces technological losses by using trained personnel;
- Increases the confidence of clients and employees in the company, in the it's capacity of producing safe products and of constant quality;
- Assures the viability of the organization and also the trust of the employees regarding the stability of the working place;
- It allows the safer introduction of changes of any kind (products, installations and new suppliers, legal modifications, modifications in the structure of personnel etc);
- Reduces the internal and external barriers by respecting the national and international legal requirements ;
- Determines the improving of the company's image and increases its credibility etc.

In order to give credibility to the functioning of the integrated quality and food safety management system, the organizations can undergo a process of certification by accredited organisms. For the certification, all units in the food industry document and impelement an integrated quality and food safety management system, realised in conformity with the Refferentials: SR EN ISO 9001:2001 – Quality management systems- requirements, respectively SR EN ISO 22000:2005 – Food Safety Systems.

The above mentioned refferentials represent general guiding lines or requirements that have to be respected by the organizations, but they don't specify clearly the particularities of the systems. This thing is determined by the numerous profiles of activity and types of units in the food industry to which they relate to, every one having it's specific, starting from the placement of the location, the dimensions, the compartimenting, number of employees and their functions to the technological processes.

So the process of documenting and of factual implementing of the two systems, although realised with respecting the same refferentials, the processing units present a different approach from the practical point of view, with the

conceiving of different procedures and creating of distinct integrated systems, taking into consideration the specific of each production unit.

### **Results and discussions**

In the process of implementation of the integrated quality and food safety management system, the named responsible at processing unit level document and implement the requirements of the SR EN ISO 9001:2001, Codex Alimentarius CAC/RPC 1-1969, revision 4:2003 and SR EN ISO 22.000:2005 referentials.

In order to implement the Quality management system (QMS) and HACCP Food safety management system there are followed several steps:

- Identification of the processes necessary for QMS and HACCP and the way of applying them in the entire society;
- Establishing the sequence and interaction of the processes necessary for QMS and HACCP;
- Establishing criteria and methods necessary in order to assure that the applying and control of products is efficient;
- Establishing measures in order to assure the dissonability of resources and information necessary for the sustaining the making and monitoring of the QMS and HACCP necessary processes;
- Establishing measures for monitoring, measuring and analyzing processes in order to continuously improve them;
- Implementing the necessary actions in order to obtain the planned results and continuous improvement of these processes.

The QMS and HACCP documentation made and implemented in each unit includes:

- A statement of the politics regulating quality and food safety, as well as the objectives that came with it;
- Quality and food safety manual (MC-HACCP);
- Documented procedures in conformity with the requirements of the referentials;
- Documents necessary for planning, operating and efficient control of the processes in society (operational procedure and working instructions);
- External documents (STAS, legal normatives, European regulations);
- Registrations of quality and food safety resulted from the developing of processes in the society.

The QMS and HACCP documentation is kept as copies on paper and electronic in the „QMS-HACCP” folder.

The elaboration and presenting degree of the QMS and HACCP documentation is in correspondences with the activities that take place in the units, with the complexity and interaction between the processes, as well as with the competence of the employees.

The QMS and HACCP documents build for the integrated quality and food safety system are structured on four levels:

- I<sup>st</sup> level – Quality and safety manual which describes QMS and HACCP in the society, the politic and aimed objectives;
- II<sup>nd</sup> level – general procedures which describe the way the society's activities comply with the requirements in the referentials;
- III<sup>rd</sup> level – Operational procedures and working instructions that describe specific activities in the society;
- IV<sup>th</sup> level– Quality and food safety registrations as well as other documents that describe the history of all activities.

All procedures are formulated without ambiguities, including methods utilized by each unit during the implementing process of the referential requirements. The stipulations of these documents are knowed and implemented at all levels, and their efficiency is periodically verified through internal audits.

The main document of the Quality and Food Safety Management system is represented by the quality and food safety manual. This is made, implemented and maintained in the profile units, in conformity with SR EN ISO 9001:2001 and SR EN ISO 22.000:2005 standards and describes the organization and responsibilities referring to QMS and HACCP implemented, the applying field, politics regarding quality and food safety. There are made references to all QMS and HACCP processes as well as interactions between these processes, mentioning in the same time which is the documentation (procedures) that establishes the way of developing the control and continuous improvement of these processes.

The field of application of the manual is referring to all activities that take place in the organizations, by all society employees and for all delivered products.

It has been documented the organizational structure and responsibilities of the personnel involved in the organizing, documenting and implementing QMS and HACCP. All organizations have mentioned in the methodology the possibility of reviewing periodically the quality and food safety manual, in the context of transforming of production processes or legislative modifications.

The propagation of the manual is made in controlled way, by the responsible established by the general manager.

#### **Document supervising**

Every unit must keep under control all documents with internal or external origin that have interactions with QMS and HACCP. This way, there are made general procedures of controlling the quality and food safety documents by which there is established that each document is verified and approved only by authorized personnel and every modification done to the QMS and HACCP documents is identified, done made and approved by persons with the same functions as the ones who initially made the documents. Every unit makes sure that the available versions of the applicable documents, including their revisions, is available in every department, sector or utilizing area. The documents must be

legible, easy to find, in order to identify every unit giving to its own documentation specific codes, determining this way the **documentation trasability**.

There are established rules of preventing the non deliberate use of stale documents, these ones being quickly retired, and the ones kept for different proposes (archive, history) being properly identified.

#### **Recording supervising**

Every unit established which the proper registrations are and it maintained them in order to give adequate proves of compliance with the requirements in SR EN ISO 9001:2001 and SR EN ISO 22.000:2005.

Determining the causes and eliminating the eventual nonconformities it's based upon the registrations analysis regarding the confirmation of the quality and food safety of the products/services resulted from all activities that took place into the society.

The registrations contain objective proves of quality and food safety of the delivered products, as ell as proves of efficient functioning of the QMS and HACCP.

All registrations must be legible identified and easy to find. They are kept under control in conformity with the procedures, by which every unit establishes the measures and necessary means for identification, storing, protecting, finding, keeping period and removing the registrations of the quality and food safety mangement system.

#### **Responsibility and authority**

There are established responsibilities and authorities in every food products processing or depositing unit, pending on the qualification degree of the personnel and function hierarchy.

Responsibilities, competence and authorities have been definite in the manual or in the working sheet, for all personnel involved directly or indirectly in the processes of obtaining food products.

The established personnel in some functions has specific responsibilities and the authority for:

- Identifying and registering every problem regarding the products, processes and QMS and HACCP systems;
- Initiating corrective measures and measures of controlling the non conforming products until the correction of the deficiency in matters of food safety;
- Initiating actions in order to prevent the showing of any non conformity regarding the product, process and QMS and HACCP systems;

The management of the society assures all the adequate resources for implementing the QMSand HACCP.

At the initiation of the implementation of the food safety management system, it is established a team for food safety by decision as well as a coordinator or a leader.

The leader of the HACCP team in correspondence to the referential requirements has both responsible and authorities. Generally speaking, the leader of the HACCP team must:

- Assure that the HACCP system is established, implemented and maintained in conformity with the chosen referential;
- Report and inform the management regarding the efficiency and adequation of the HACCP system for the analysis and as a basis for it's improving;
- Organize the HACCP team activity in a way adequate to the process and the production but in the same time efficient.

#### **Establishing authorities**

In order to assure the continuity of the functioning of the integrated quality and food safety management system, there must be always assured the existence of authority. This way, each unit has established the persons to which is given the authority in case of the missing of the established responsible of every activity. These aspects are specified in the working/job sheet which the units made for the personnel.

The established persons must know watch does authority and liberty of taking decisions, what initiating preventing non conformity actions, what identifying and registering all problems regarding the quality of products, and what the recommendation of solutions and verifying it's applicability mean.

#### **Preparing and answer in emergency cases**

The Highest level management established the methods of managing the situations in which accidents that could have an impact on the food safety take place. For this, there are followed the stipulations of the Notification retiring procedure, which mentions the working rules and responsible regarding the answer in emergency cases.

### **Conclusions**

- QMS and HACCP documents build for the integrated quality and food safety systems can be structured on four levels pending on the specific requirements of the activity.
- Applying of the HACCP food safety management system is compatible with implementing a quality management system through which it is demonstrated that in the unit in which is applied there are obtained products of constant quality, unvariable in time.
- The documentation process and of effective implementation of the two management systems (quality and food safety), although having as a starting point the effectual referentials, present a different approach from the practical point of view, with the conceiving of different procedures and creating distinct

integrated systems, taking into consideration the specific of each production unit.

- The implementation of the HACCP food safety management system is useful for practical reasons, because this way the producers can control their products during the entire technological flow to the obtaining of final products, having this way the possibility of always offering safe products to the consumer.
- The top management must prove permanently its engagement regarding the developing, implementing and continuous improving of QMS and HACCP by methods specified in the referentials, but adapted to the reality of its own unit.

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