PECB

When Recognition Matters

History of Product

TRACEABILITY IN THE FOOD CHAIN
ISO 22005:2007

Traceability in the Food Chain - ISO 22005:2007

Globalization and cross-national trade of food products have increased the number of foodborne illness in many countries. Outbreaks of botulism, salmonellosis and listeriosis are considered to be the largest food poisoning outbreaks which cause millions of illnesses, thousands of hospitalizations, and many deaths every year. These food safety and public health concerns push companies to adopt preventive measures for product identification and traceability. Traceability, also known as product tracing, is the ability to track and follow the movement of products throughout the food chain. Food chain is the term that comprises all stages and operations involved in the production, processing, distribution, storage and handling of a food and its ingredients, from primary production to consumption.

Food producers, manufacturers, and retailers address the management of food safety and quality through implementation of food safety and quality management systems based on international standards such as ISO 9001 and ISO 22000. Effective implementation and operation of these management systems requires the organizations to establish and maintain a traceability system. This system enables the identification of product lots and their relation to batches of raw materials, processing and delivery records. Thus, traceability is of greater importance to food industry considering that food safety hazards can occur at any stage of the food chain. So in case of a food incident occurrence, the traceability system will facilitate the process of product recall or withdrawal of defective or potentially unsafe products from the marketplace.

Nowadays, traceability has become a regulatory requirement to protect human health and consumers interests in relation to food. National and international standards have made it even easier. Besides many other guidance standards and technical specifications of ISO 22000 family, the International Organization for Standardization (ISO) published ISO 22005:2007, an international standard that gives the principles and specifies basic requirements for the design and implementation of a traceability system, in agro-food industry (including feeds).

ISO 22005: 2007 requires organizations within the food chain to include the following aspects in the design of a traceability system:

1. Identify the objectives of traceability system;
2. Identify the relevant regulatory and policy requirements (local, regional, national or international regulations) to be met by the traceability system;
3. Identify the relevant products and/or ingredients for which the objectives of its traceability system apply;
4. Determine the position of the organization within the supply/food chain through at least identifying its suppliers and customers;
5. Determine and document the material flow in a way it meets the objectives of the traceability system;
6. Define the information requirements:
    – to be obtained from its suppliers,
    – to be collected concerning the product and process history, and
    – to be provided to its customers and/or suppliers.
7. Establish procedures to assist the management of traceability information, including:
    – product definition;
    – lot definition and identification;
    – documentation of flow of materials, and information including media for record keeping;
    – data management and recording protocols;
    – information retrieval protocols.
8. Determine documentation required to achieve the objectives of the traceability system.
9. Coordination in the food chain is essential and each organization should identify its immediate prior sources and immediate subsequent recipients.

It is important to be aware that the traceability system is simply a mean for attaining defined objectives in food safety. And it is important not to hold high expectation, such as making traceability system itself as a food safety objective. ISO 22005:2007 makes it very clear that this system is only a technical tool that assists organizations achieve defined objectives in the Food Safety Management System; and on its own it is insufficient to achieve food safety. The international standard that contains the overall guidelines for food safety management systems is ISO 22000.

The ability to trace the history, application and location of products up and down the supply chain is of high importance especially in the food chain. Establishment and application of a traceability system have become a mandatory requirement for food businesses, as it is a part of an overall food safety management system. Organizations involved in the food chain willing to comply with and get certified to the international standard for food safety management systems, ISO 22000, should have their product traceability system in place. ISO 22005 is another standard of ISO 22000 series which gives the principles and basic requirements for the design and implementation of a food traceability system.

PECB (Professional Evaluation and Certification Board) is a personnel certification body for a wide range of professional standards. It offers ISO 22000 training and certification services for professionals who want to gain a comprehensive knowledge of the main processes of an FSMS, project managers or consultants wanting to prepare and support an organization in the implementation of an FSMS, auditors wanting to perform and lead FSMS certification audits, and staff involved in the implementation of the ISO 22000 standard.

ISO 22000 and Food Safety Trainings offered by PECB:
- Certified ISO 22000 Lead Implementer (5 days)
- Certified ISO 22000 Lead Auditor (5 days)
- Certified ISO 22000 Foundation (2 days)
- ISO 22000 Introduction (1 day)

ISO 22000 Lead Auditor, ISO 22000 Lead Implementer and ISO 22000 Master are three certification schemes accredited by ANSI ISO/IEC 17024.

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