Chapter 14

ISO 22000Series of standards on PRPs

Mrs. Priya, E. R., Dr.Laly, S. J. and Dr.Satyen Kumar Panda
Quality Assurance and Management Division
ICAR-Central Institute of Fisheries Technology

Prerequisite Programs (PRPs)

PRPs are the basic conditions and activities that are necessary to maintain a hygienic environment throughout the food chain suitable for the production, handling and provision of safe end products and safe food for human consumption.

Prerequisite requirements - ISO 22000

ISO 22000 requires that the organization establishes PRP programs to control the likelihood of introducing contamination through the work environment. ISO 22000 identifies areas and programs that must be considered during the development of PRPs. Examples: pest control programs, personnel hygiene and lay-out of premises. However, the standard leaves the responsibility for developing the details of the program to the organization; it does not give specific requirements for the PRPs, organization needs to determine the appropriate PRPs according to the requirements.

To give companies a guidance on prerequisite programs, ISO has published a technical specification, ISO/TS 22002-1 "Prerequisite programs on food Safety-Part 1: food manufacturing". ISO/TS 22002-1 and is intended to be used with the ISO 22000 standard, and gives more detailed requirements for food manufacturers to follow when developing and implementing PRPs. Unlike ISO 22000, which applies to all organizations in the food chain, ISO 22002 applies only to Manufacturers of food.

ISO 22002 Technical Specifications (TSs) are guidance documents, not intended for certification, but intended for assisting an organization in establishing, implementing and maintaining prerequisite programmes (PRP) in accordance with ISO 22000ISO/TS 22002-1:2009 specifies requirements for establishing, implementing and maintaining prerequisite programmes (PRP) to assist in controlling food safety hazards. ISO/TS 22002-1:2009 is applicable to all organizations, regardless of size or complexity, which are involved in the manufacturing step of the food chain and wish to implement PRP in such a way as to address the requirements specified in ISO 22000:2005, Clause 7. ISO/TS 22002-1:2009 is neither designed nor intended for use in other parts of the food supply chain. Food manufacturing operations are diverse in nature and not all of the requirements specified in ISO/TS 22002-1:2009 apply to an individual establishment or process. Where exclusions are made or alternative measures implemented, these need to be justified and documented by a hazard analysis, as described in ISO 22000:2005, 7.4. Any exclusions or alternative measures adopted should not affect the ability of the organization to comply with these requirements.

ISO/TS 22002-1:2009 specifies detailed requirements to be specifically considered in relation to ISO 22000:2005, 7.2.3:
a) construction and layout of buildings and associated utilities;

b) layout of premises, including workspace and employee facilities;

c) supplies of air, water, energy, and other utilities;

d) supporting services, including waste and sewage disposal;

e) suitability of equipment and its accessibility for cleaning, maintenance and preventive maintenance;

f) management of purchased materials;

g) measures for the prevention of cross-contamination;

h) cleaning and sanitizing;

i) pest control;

j) personnel hygiene.

In addition, ISO/TS 22002-1:2009 adds other aspects which are considered relevant to manufacturing operations:

1) rework;

2) product recall procedures;

3) warehousing;

4) product information and consumer awareness;

5) food defence, bio vigilance, and bioterrorism.

STANDARDS BY ISO/TC 34/SC 17 -Management systems for food safety

There are 11 standards and/or project under the direct responsibility of ISO/TC 34/SC 17 secretariat, as follows:

1. ISO 22000:2018- Food safety management systems — Requirements for any organization in the food chain
2. ISO/TS 22002-1:2009 -Prerequisite programmes on food safety — Part 1: Food manufacturing
3. ISO/TS 22002-2:2013 -Prerequisite programmes on food safety — Part 2: Catering
4. ISO/TS 22002-3:2011 -Prerequisite programmes on food safety — Part 3: Farming
5. ISO/TS 22002-4:2013 -Prerequisite programmes on food safety — Part 4: Food packaging manufacturing
6. ISO/TS 22002-5:2019 -Prerequisite programmes on food safety — Part 5: Transport and storage
7. ISO/TS 22002-6:2016 -Prerequisite programmes on food safety — Part 6: Feed and animal food production
8. ISO/AWI 22003-2 -Food safety management systems — Requirements for bodies providing audit and certification of food safety management systems — Part 2: Requirements for bodies providing audits of food safety management system elements in conjunction with safe food product/process certification
9. ISO/CD 22003-1 -Food safety management systems — Requirements for bodies providing audit and certification of food safety management systems — Part 1: Requirements for bodies providing audit and certification of food safety management systems
10. ISO/TS 22003:2013 -Food safety management systems — Requirements for bodies providing audit and certification of food safety management systems
11. ISO 22005:2007 -Traceability in the feed and food chain — General principles and basic requirements for system design and implementation

Reference: ISO/TC 34/SC 17 – Management System for Food Safety