

Integration of HACCP and Quality Management Systems – Views from a Registrar

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HACCP

- Accepted by the food industry community as a system for identifying and controlling known food safety hazards.
- Enhances safety through a systematic, science based program
- Implies that the system is controlling known hazards

HACCP for Water Utilities

- The HACCP approach (application of HACCP Principles) can be applied in other industries
 - e.g. Pharmaceuticals, medical devices, packaging, water utilities
- No current internationally accepted guidelines for application of HACCP Principles for the Water Utilities
- Codex Alimentarius
 - Describes food hygiene principles
 - includes HACCP Principles
 - Written for the food industry but the principles outlined in the document are applicable to all types of industries

Codex Alimentarius

Codex Alimentarius Commission

- Implements the Joint FAO/WHO Food Standards Programme
- Developed a collection of internationally adopted food safety standards:
 - *Codex Alimentarius*
 - Includes Guidelines for the Application of a HACCP System
 - Included in these Guidelines they recommends that the "Application of HACCP is compatible with the implementation of quality management systems, such as the ISO 9000 series, and is the system of choice in the management of food safety within such systems

ISO 9001:2000 – Quality Management System - Requirements

- Primarily concerned with "quality management"
 - "Quality management"
 - **ensure** that its products or services **satisfy** the customer's quality requirements and
 - **comply** with any regulations applicable to those products or services
- Quality: (def) all those features of a product (or service) which are required by the customer
- Promotes the consistent quality practices
- Promotes the adoption of the process approach
 - Plan-Do-Check-Act (PDCA)
 - Similar to the application of HACCP Principles

Integration of a HACCP and Quality System

- European Community (EC) Directive 93/43/EEC of 14, June 1993 on the Hygiene of Food Stuffs
 - Suggested the integration of HACCP with the quality management systems requirements of ISO 9000
- ISO/TC 34
 - Recommended the application of HACCP within an ISO 9001 QMS result in a more effective program than HACCP alone
- ISO 15161:2001 - “Guideline on the Application of ISO 9001:2000 for the food and drink industry”
- ISO/CD 22000 – Food Safety Management Systems – Requirements
 - Guidance document describing the requirements of a food safety management system

Integration of a HACCP and Quality System

Based on assumption:

There can not be quality without safety

Integration of a HACCP and Quality System

- Together HACCP and ISO 9001 is a system for identifying, managing and improving the water safety risks
- Integration only increases the opportunity for an organization to be able to show consistency and prevention
- By combining systems, an organization uses a single system for managing water safety and quality.
- In an integrated system HACCP is a part of the Quality Management System

Relationship of HACCP and ISO 9001

- The requirements in ISO 9001 compliments the requirements of HACCP System and enables effective implementation
- Expands on the HACCP Principles

Relationship of HACCP and ISO 9001

ISO Elements:

- Most have documents/procedures to ensure effective processes
 - Monitoring, SOPs, Verification
- Control Documents
 - Control Monitoring/Verification Procedures
- Control Records
 - Control CCP, verification records
- Management must commit to implementation and improve its effectiveness
 - Codex recommends commitment from Management to implement HACCP system

Relationship of HACCP and ISO 9001

ISO Elements:

- Quality Policy/Objectives
 - Includes statements and objectives related to water safety
- Plan the Quality System
 - Plan the implementation of safety requirements
- Defined Responsibilities/Authorities
 - Who is responsible for monitoring, corrective action, recall?
 - Employee effects on water safety
- Appropriate communications - Internal/external
 - Customer requirements, regulatory
- Review the system
 - Verification, revalidation

Relationship of HACCP and ISO 9001

ISO Elements:

- Provide resources
 - Equipment, facilities, employees
- Competency and Training
 - CCP training, hygiene, skills/experience
- Infrastructure
 - Equipment, facilities to meet requirements
- Work Environment

Relationship of HACCP and ISO 9001

ISO Elements:

- Plan processes for product realization
 - Requirements for drinking water
- Review of requirements
 - Records
 - Regulatory requirements
- Customer communication
 - Inquiries, public notices
- Design
- Purchasing
 - Purchased supplies must conform to criteria/requirements
 - E.g. NSF Std 60/61
 - Verify the purchased supply

Relationship of HACCP and ISO 9001

ISO Elements:

- Controlled Conditions
 - Monitoring procedures
- Validation
- Identification and Traceability
- Preservation of product
- Control of monitoring and measuring devices
 - Devices used for CCP monitoring must be calibrated/verified

Relationship of HACCP and ISO 9001

ISO Elements:

- Monitor/Measure Customer Satisfaction
 - Impact of customer feedback on HACCP System
- Internal Audit
- Monitoring and Measurement of Processes
 - HACCP Principle 4
- Monitoring and Measurement of Product
 - HACCP Principle 6
- Control of Nonconforming Product
 - HACCP Principle 5 – Corrective Action

Relationship of HACCP and ISO 9001

ISO Elements:

- Analysis of Data
 - How does analysis of collected data impact the HACCP system?
- Continual Improvement
 - HACCP System should allow for change
 - Revalidation
 - Verification
- Corrective Action
 - HACCP Principle 5
- Preventive Action
 - HACCP Process

HACCP and Quality System

An integrated HACCP and Quality System looks at the overall management system:

- Effectiveness of the management of risk
- Capability to maintain and exceed compliance with regulatory requirements
- Adequacy of the emergency preparedness and response
- Implementation of operational risk control, monitoring and measurement
- Continuous improvement of management system performance

Why Integrate?

- ISO and HACCP separate good...together great
- A truly integrated system gives the greatest possible assurance for water safety and quality
- An integrated system moves beyond the regulatory requirement and ensures consistent practices.
- Improve public health protection
- A comprehensive management system integrating HACCP Principles may be more effective and less costly than simply responding to concerns as they arise.
- Proactive rather than reactive

Integrated HACCP and Quality Systems

- Those companies that have a high level of integration of the elements of HACCP and Quality Systems have benefited the most.
- The amount of cost savings varies with the maturity of the management system and the company's level of integration of the two systems.
- Effective business management by integrating the use of the HACCP technique
- By setting up a good “management system” it can be extended to other systems such as ISO 14001 or even OHSAS 18001 (workers' safety)