

Integrating Safety, Environment, and Quality Systems

In 2013, the World Renderers Organization (WRO) published its first *Guidelines for Hygienic Rendering*. Developed by the WRO Scientific Advisory Panel and edited by Stephen Woodgate, the document was intended to provide best practice guidelines to offer useful advice and uniform approaches to the rendering industry on a global scale. The terms of references for the guidelines were prepared and a range of topics were listed.

At the time, it was proposed and supported by WRO members that the first guidelines be about hygiene and product safety thus it contained the following sectional topics:

- Management plan
- Construction of premises and equipment
- Operation requirements
- Heat treatments
- Microbial testing
- Ruminant feeding
- Traceability
- Training

Of particular note, the guidelines highlighted best practices as shown in table 1.

WRO recognized that some countries already have well-established legislation or codes of practice relating to the safety of rendered products. The WRO guidelines were not intended to be used in place of those existing parameters – extracts from existing codes and legislation were incorporated into the guidelines – but rather were developed to define the minimum requirements that could be augmented in different countries depending on circumstances. While countries may have codes and legislation that differ from the WRO guidelines, the guidelines should demonstrate that renderers facing common issues around the world can address them by applying universal principles.

Every renderer should have a quality management system to help manage business and production processes. In some cases, systems may be an in-house design that meets business needs. In other cases, the management system

may be industry- or standards-based, such as ISO 9001, which is administered by the International Organization for Standardization (ISO). The complexity of the system will depend on the scope of coverage.

The WRO guidelines advise best practices for the management plan to implement and comply with ISO 9001 or ISO 22000. These international standards provide a guide for an organization to establish policies and procedures for the planning and execution of managing quality-related business processes. Rendering plant operators, however, not only need to produce safe products while meeting the needs of the customer, but must also be able to manufacture the product safely and without damaging the environment. Therefore, the next generation of management systems should integrate quality, safety, and environmental systems.

The rendering industry is no stranger to dealing with environmental concerns. Through design and technological advances, commitment, and capital outlay, renderers are meeting environmental and safety obligations. As rendering plants are modernized or replaced, higher standards of operation are put into place so facilities comply with improved plant safety and environmental standards.

Where ISO 9001 was identified as best practice for a management plan, should we also consider integrating safety and environmental management systems? Is best practice being compliant with the global environment and safety management systems of OHSAS 18001 (British Standard for Occupational Health and Safety Assessment Series) or Australian/New Zealand Standard 4801 and ISO 14000, respectively? Are there certain elements of management planning that could tie safety and environment in with the quality management system?

Operating a rendering facility raises safety and environmental concerns that need to be effectively managed. Implementing a model systems approach incorporates management of risk and maximizes opportunities. Integrating management systems where quality, safety, and environment are all covered makes good business sense.

Table 1. WRO recommendations for best practices in hygienic rendering

Guideline Section	Rendering Best Practice
Management plan	To document a quality management system that complies with either of the international standards: ISO 9001:2008 "Quality management systems – Requirements" ISO 22000:2005 "Food safety management systems – Requirements for any organization in the food chain"
Construction of premises/equipment	For rendering building, raw material receiving areas and product storage areas to be in an enclosed building that effectively restricts access for insects, birds, vermin, and rodents. For floor and walls to be constructed from smooth and impervious material and surface be maintained in this state for ease of cleaning. For floor to ceiling walls that enclose raw material handling, rendering process, milling, and meal storage in separate areas.
Operation requirements	To employ separate staff in raw material and cooked products areas.

Rendering has progressed from “recycling” to “sustainable” and it is a good story to tell. The industry is doing the right thing servicing customers through collection and processing. Renderers manufacture products that are in high demand by various industries. We are obliged to operate our plants safely and with regard to the environment.

The industry’s commitment to quality, safety, and the environment should include the provision of safe working practices, a safe working environment, pollution prevention, safeguards against all identified risks, assessing audit results, analyzing the cause of non-conformances, and evaluating the effectiveness of corrective actions. Operating an integrated quality, safety, and environmental management system that meets the requirements of international standards would be a generational change.

**The next WRO meeting
is in conjunction with
the National Renderers
Association convention
on Amelia Island, Florida,
October 17-21, 2016.**

A revision to the WRO guidelines needs to be considered as ISO 9001 has recently been updated. The new standard, ISO 9001:2015, was reviewed to ensure it is relevant and reflects current business practices and processes, and market demand. The most recent change is significant and will impact current management systems.

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