

Risk information – Liability

Traceability in the food and beverage sector

Introduction

Traceability systems utilised within the Food and Beverage sector differ greatly in their precision, depth and breadth.

An effective traceability system aids in the retrieval of products in the event of a food safety or quality related incident. The (ISO) 8402 states that 'traceability defines the ability to trace the history, application and location of an entity by means of recorded identification.'¹

In Australia and New Zealand the Food Standards Code specifies that (at the time of Risk Improvement Guide publication) other than in those circumstances documented '...the label on a package of food must include its lot identification.'²

For products to remain traceable in the market place, unique identification is essential. This is normally achieved via the use of a batch number, which includes use by or best before information as applicable. Unique codes can include detailed information such as time of production, line of production, place of production and production sequence.

It is recommended that companies record what constitutes a production batch or lot for their business and that they record which batch or lot of product has been issued to distributors and or customers.

In addition strict quality control procedures should exist for the documentation of lot identification and use by or best before information on production records.

Quality Assurance personnel should verify this information when reviewing production records.

In the event of a product-related recall or withdrawal the prompt availability of this information is critical.

Ingredient and packaging traceability

Site specific programs should exist to ensure traceability of packaging, ingredients and rework product. These areas are often overlooked in a traceability program and can be essential in limiting a product-related recall or withdrawal.

At a site level systems should be implemented that document the traceability of ingredient components in the final product. With any production run all components utilised in the batch should be traceable. It is at the ingredient preparation and pre-weigh areas that manual recording systems should be in place (at minimum) to document what batch of ingredient/component is utilised in which production batch. Ideally a bar code tracking system can be utilised to monitor all ingredients utilised in a production batch. This provides the details of pre-coded batch information and minimises the human error associated with manual recording systems.

Food Industries are now also utilising cutting edge technology in this area such as radio frequency identification technology.



In addition to ingredients, packaging can pose a hazard and therefore its traceability is essential. All packaging material in direct contact with food products should be traceable in the same manner as ingredients, examples include manual recording or a bar code tracking system.

1. International Standards Organisation ISO Standard 8402.
2. Australia New Zealand Food Standards Code.

Benefits of raw material and packaging traceability

Should a raw material or packaging component be subject to a product recall / withdrawal or the possibility of it affecting shelflife duration, traceability in the final product is essential in:

- ▼ Reducing the quantity of product required to be recalled.
- ▼ Minimising further third party injury.
- ▼ Reducing the cost of a product recall.
- ▼ Obtaining the maximum amount of affected product as possible.
- ▼ Minimising unsubstantiated claims by producing documented evidence of precisely which batch of final product is affected.

Rework traceability

Rework traceability is important as it provides information on the location of a batch of reworked product in relation to the final product.

Often reworked product may result from a number of different areas such as production run surplus, process problems or out of specification product.

Therefore it is essential for the facility to document all areas in which rework is permitted and under what conditions it can be retained and reused. Traceability of rework is essential in relation to the use of potential food allergens and the labelling of final products, refer to Food Allergens Risk Improvement Guide in this series.

System verification

The internal audit program should include a review of traceability documents for raw materials, packaging and rework. In addition audits should include a random review of manually recorded or barcode-tracking data documented during production against those batch ingredients currently in use. This provides an ongoing review of these systems and aids in detecting and minimising specific operator related recording issues.

The conducting of mock recalls is an essential part of any verification program. Mock recall scenarios should challenge the adequacy of the current traceability system.

In addition to utilising mock recalls to verify the traceability of finished product, mock recall scenarios should also focus on supplier related products. Therefore mock recall scenarios should challenge the traceability of raw ingredient components and packaging. This ensures that in the event of a supplier-related recall the purchaser can effectively locate the used ingredients or packaging in their final product. In addition mock recall scenarios should include product rework conducted on site to ensure traceability.

The findings of such verification exercises should be documented to include:

- ▼ the mock recall scenario,
- ▼ staff involved,
- ▼ internal departments notified,
- ▼ all associated documents pertaining to product traceability,
- ▼ start and finish time of mock recall,
- ▼ the amount of product retrieved,
- ▼ an assessment of mock recall adequacy,
- ▼ and recommended improvements to the system.

A number of fundamental systems can be established at a site level to ensure all product components are traceable from raw material receipt to dispatch.