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DRAFT ZANZIBAR NATIONAL STANDARD

Code of hygienic practices for spices and dried aromatic plants

ZANZIBAR BUREAU OF STANDARDS

Foreword

This draft Zanzibar national standard has been prepared by the spices and culinary herbs technical committee. In accordance with the Zanzibar Bureau of Standards General Procedures, this draft is here by presented to the public in order to receive any technical comment concerns.

In the preparation of this standard, the reference was made to the following sources:

ZNS 88 : 2015 code of hygienic practice for spices and dried aromatic plants - specification IS 14216 : 2023 spices and condiments processing units — code of hygiene practices

Zanzibar bureau of standard (ZBS) P.o.box 1136 Zanzibar

Tel: +255 24 2232225 Fax: +255 24 2232225 E-mail: Info@zbs.go.tz Web: <u>Www.zbs.go.tz</u>

Code of hygienic practices for spices and dried aromatic plants

1 Scope

This code of hygienic practice applies to spices and dried aromatic plants -whole, broken, ground or blended. It covers the minimum requirements of hygiene for production, harvesting, post-harvest technology (curing, bleaching, drying, cleaning, grading, packing, transportation and storage including microbial and insect disinfestation) processing establishment, processing technology (grinding, blending, freezing and freeze drying, etc.) packaging and storage of processed products.

2 Normative references

The following referenced documents are indispensable for the application of this draft zanzibar national standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

ZNS 57; Potable water - Specification

ZNS 376; Terminology for spices and condiments

3 Terms and definitions

For the purpose of this standard, the terms and definition given in ZNS 376 and the following apply.

3.1

spices

dried aromatic plants, relates to natural dried components or mixtures thereof, used in foods for flavouring, seasoning and imparting aroma. the term applies equally to spices in the whole, broken or ground form

3.2

dried aromatic plants

plant that produce and exude aromatic substances which are used in food

3.3

blended spice products

products are obtained by mixing and grinding, cleaned, dried and sound selected spices

3.4

potable water

water either in its original state or after treatment, intended for human drinking, cooking, food preparation, or other domestic purposes, food production, regardless of its origin whether it is supplied from a distribution network, from a tanker or in bottles

3.5

source plant

plant (non-dried) from which the spice or dried culinary herb is derived

4 Design and facilities

Establishment should be designed and constructed in such a way to enable hazards to be effectively controlled by ensuring that:

- a) contamination is minimized;
- b) design and layout permit appropriate maintenance, cleaning and disinfections and minimize air-borne contamination;
- c) surfaces and materials, in particular those in contact with products, are non-toxic in intended use and, where necessary, suitably durable, and easy to maintain and clean and
- d) where appropriate, suitable facilities are available for temperature, humidity and other

controls; and there is effective protection against pest access and harbourage.

4.1 Location

4.1.1 Establishment

Should preferably be located in areas which are free from objectionable odours, smoke, dust or other contaminants and are not subject to flooding.

Roadways and areas used by wheeled traffic; such roadways and areas serving the establishment which are within its boundaries or in its immediate vicinity should have a hard paved surface suitable for wheeled traffic. There should be adequate drainage and provision should be made to allow for cleaning.

4.1.2 Equipment

All equipment and utensils used in food handling areas and which may contact food should be made of food grade materials which do not transmit toxic substances, odour or taste, is non-absorbent, is resistant to corrosion and is capable of withstanding repeated cleaning and disinfection. Surfaces should be smooth and free from pits and crevices. The use of wood and other materials which cannot be adequately cleaned and disinfected should be avoided except when their use would clearly not be a source of contamination. The use of different metals in such a way that contact corrosion can occur should be avoided.

Equipment should be installed so as to allow access for cleaning and to minimize transfer of dust Particles to other pieces of equipment or to the environment. The risk of contamination from equipment should be assessed and controlled. Wherever possible, forklifts, utensils, and maintenance tools for the finished product and packaging areas should be different from those used in the "raw" Material area (for example, prior to the microbial reduction treatment).

4.2 Premises and rooms

4.2.1 Buildings and facilities should

- **a)** be of sound construction and maintained in good repair. All construction materials should be such that they do not transmit any undesirable substances to food. All construction materials should be such that, when construction is completed, they do not emit toxic vapour.
- **b)** have adequate working space should be provided to allow for satisfactory performance of all operations.
- c) the design should be such as to permit easy and adequate cleaning and to facilitate proper supervision of food hygiene.
- **d)** be designed to prevent the entrance and harbouring of insects and other vermin and the entry of environmental contaminants such as smoke, dust, etc.
 - **e)** be designed to provide separation, by partition, location or other effective means, between those operations which may cause cross-contamination.

f) be designed to facilitate hygienic operations by means of a regulated flow in the process from the arrival of the raw materials at the premises to the finished product, and should provide for appropriate temperature conditions for the process and the product.

4.2.2 Spices handling areas

The following should be considered during designing of spice handling area:

- **4.2.3** Floors should be of water-proof, non-absorbent, washable, non-slip and non-toxic materials, without cracks or crevices, and should be easy to clean and disinfect. Where appropriate, floors should slope sufficiently for liquids to drain to trapped outlets.
- **4.2.4** Walls should be of water-proof, non-absorbent and washable materials, sealed and free of insects and should be light coloured. Up to a height appropriate for the operation these should be smooth and without cracks or crevices, and should be easy to clean, disinfect and disinfest. Where appropriate, angles between walls, between walls and floors, and between walls and ceilings should be sealed and covered to facilitate cleaning.
- **4.2.5** Ceilings should be so designed, constructed and finished as to prevent the accumulation of dirt and minimize condensation, mould development and flaking, and should be easy to clean.
- **4.2.6** Windows and other openings should be so constructed as to avoid accumulation of dirt and those which open should be fitted with insect-proof screens. Screens should be easily movable for cleaning and kept in good repair. Internal window sills, if present, should be sloped to prevent use as shelves.
- **4.2.7** Doors should have smooth, non-absorbent surfaces and where appropriate, be self-closing and close fitting.
- **4.2.8** Stairs lift cages and auxiliary structures such as platforms, ladders and chutes should be so situated and constructed as not to cause contamination to food. Chutes should be constructed with inspection and cleaning hatches.
- **4.2.9** Overhead structures and fittings should be installed in such a manner as to avoid contamination of the finished product and raw materials by condensation and drip, and should not hamper cleaning operations. These should be insulated, where appropriate, and be so designed and finished as to prevent the accumulation of dirt and to minimize condensation, mould development and flaking. They should be easy to clean.
- **4.2.10** Living quarters, toilets and areas where animals are kept should be completely separated from and should not open directly on to spice handling areas.
- **4.2.11** Where appropriate, establishments should be so designed that access to various sections can be controlled.
- **4.2.12** The use of materials which cannot be adequately cleaned and disinfected, such as wood, should be avoided unless its use would clearly not be a source of contamination.

4.3 Facilities

4.3.1 Water supply

- 4.3.1.1 An adequate supply of potable water with appropriate facilities for its storage, distribution and temperature control, should be available and conform to the zns 57 whenever necessary to ensure the safety and suitability of products.
- 4.3.1.2 Non-potable water (for use in, for example, fire control, steam production, refrigeration and other similar purposes where it would not contaminate product), shall have a separate system. Non-potable water systems shall be identified and shall not connect with, or allow reflux into, potable water systems.

4.3.1.3 Ice should be made from potable water and comply to relevant Zanzibar standards; it should be manufactured, handled and stored so as to protect it from contamination. Steam used in direct contact with food or surfaces in contact with food should contain no substances which may be hazardous to health or contaminate the food.

4.3.2 Effluent and waste disposal

Establishments should have an efficient effluent and waste disposal system which should at all times be maintained in good order and repair. All effluent lines (including sewer systems) should be large enough to carry peak loads and should be so constructed as to avoid contamination of potable water supplies.

4.3.3 Changing facilities and toilets

- 4.3.3.1 Adequate, suitable and conveniently located changing facilities and toilets should be provided in all establishments. Toilets should be so designed as to ensure hygienic removal of waste matter. These areas should be well lit, ventilated and, where appropriate, heated and should not open directly into the handling areas.
- 4.3.3.2 Hand washing facilities with warm or hot and cold water, a suitable hand-cleaning preparation, and hygienic means of drying hands, should be provided adjacent to toilets and in such a position that the employee must pass them when returning to the processing area. Where hot and cold water are available mixing taps should be provided. Where paper towels are used, a sufficient number of dispensers and receptacles should be provided near to each washing facility. Taps of a non-hand operation type are desirable. Notices should be posted directing personnel to wash their hands after using the toilet.

4.3.4 Hand-washing facilities in processing areas

- 4.3.4.1 Adequate and conveniently located facilities for hand washing and drying should be provided wherever the process demands. Where appropriate, facilities for hand disinfection should also be provided.
- 4.3.4.2 Warm or hot and cold water and a suitable hand cleaning preparation should be provided. Where hot and cold water are available mixing taps should be provided. There should be suitable hygienic means of drying hands.
- 4.3.4.3 Where paper towels are used, a sufficient number of dispensers and receptacles should be provided adjacent to each washing facility. Taps of a non-hand operated type are desirable. The facilities should be furnished with properly trapped waste pipes leading to drains.

4.3.5 Disinfection facilities

Where appropriate, adequate facilities for cleaning and disinfection of working implements and equipment should be provided. These facilities should be constructed of corrosion-resistant materials, capable of being easily cleaned, and should be fitted with suitable means of supplying hot and cold water in sufficient quantities.

4.3.6 Lighting

Adequate natural or artificial lighting should be provided throughout the establishment. Where appropriate, the lighting should not alter colours and the intensity should not be less than:

- a) 540 lux (50 foot candles) at all inspection points
- b) 220 lux (20 foot candles) in work rooms
- c) 110 lux (10 foot candles) in other areas.

Light bulbs and fixtures suspended over food materials in any stage of production should be of a safety type and protected to prevent contamination of the material in case of breakage.

4.3.7 Ventilation

Adequate ventilation should be provided to prevent excessive heat, steam condensation and dust and to remove contaminated air. The direction of the air-flow within the plant should never be from a dirty area to a clean area. Ventilator openings should be provided with a screen or other protective enclosure of noncorrodible material. Screens should be easily removable for cleaning.

4.3.8 Facilities for storage of waste and inedible material

Facilities should be provided for the storage of waste and inedible material prior to removal from the establishment. These facilities should be designed to prevent access to waste or inedible material by insects and other vermin and to avoid contamination of food, potable water, equipment and buildings or roadways on the premises.

5 Control of operation

5.1 Production

- **5.1.1** Spices should not be grown or harvested where the presence of potentially harmful substances would lead to an unacceptable level of such substances in the final product. Raw spices should be protected from contamination by human, animal, domestic, industrial and agricultural wastes which may be present at levels likely to be a hazard to health. Adequate precautions should be taken to ensure that these wastes are not used and are not disposed of in a manner which may constitute a hazard to health through the food. Arrangements for the disposal of domestic and industrial wastes in areas from which raw materials are derived should be acceptable to the official agency having jurisdiction.
- **5.1.2** Spices should not be grown or produced in areas where the water used for irrigation might constitute a hazard to health to the consumer through the spices.

5.1.3 Incoming material requirements

Spices and dried culinary herbs or their source plants should not be accepted by the establishment if they are known to contain contaminants which will not be reduced to acceptable levels by normal processing procedures, sorting or preparation. Precautions should be taken to minimize the potential for contamination of the establishment and other products from incoming materials that may be contaminated. Plants, parts of plants, spices and dried culinary herbs suspected of being contaminated with animal or human faecal material should be rejected for human consumption. Special precautions should be taken to reject spices and dried culinary herbs showing signs of pest damage or mould growth because of the potential for them to contain mycotoxins such as aflatoxins. raw materials should be inspected and sorted prior to processing (foreign matter, odour and appearance, visible mould contamination).

5.2 Drying

5.2.1 Natural drying

- 5.2.1.1 Plants or parts of plants used for the preparation of spices and dried culinary herbs may be dried naturally, for example, air dried, provided adequate measures are taken to prevent contamination of the raw material during the process.
- 5.2.1.2 The drying time depends on the environmental conditions surrounding the product, that is temperature, relative humidity, and air velocity. If dried naturally, plants or parts of plants should be dried on clean, elevated racks, clean covered concrete floors, or clean mats or tarps or by hanging under a non-leaking roof and not on the bare ground or in direct contact with the soil. Drying time should be controlled by using optimal drying conditions (for example, temperature, humidity and ventilation) to avoid fungal growth, toxin production and over drying of source plant. The thickness layer of the drying source plant material should be considered in order to consistently achieve a safe moisture level.
- 5.2.1.3 Pathways should be made in the drying area to prevent anyone from walking on the crop. The drying plant material should be raked/turned frequently to limit mould growth.
- 5.2.1.4 Covered concrete floors or slabs poured specifically for drying source plants should be subject to an appropriate cleaning program and, where appropriate, disinfected. New concrete slabs should be used for drying only when it is absolutely certain that the new concrete is well-cured, covered and free of excess water.
- 5.2.1.5 A suitable plastic cover spread over the entire new concrete slabs can be used as a moisture barrier; however, the sheet should be completely flat to prevent the pooling of water.
- 5.2.1.6 Suitable precautions should be taken, where practicable, to protect the spices and dried culinary herbs from contamination and damage by domestic animals, rodents, birds, mites, insects or other objectionable substances during drying, handling and storage. If drying outdoors, drying platforms should be placed under a roof/tarp free of tears, holes or frayed material that will prevent rewetting by rainfall and contamination from birds overhead.

5.2.2 Mechanical drying

- 5.2.2.1 Plants or parts of plants used for the preparation of spices and dried culinary herbs may be dried mechanically (for example, forced air drying), provided adequate measures are taken to prevent contamination of the raw material during the process. To prevent the growth of microorganisms, especially mycotoxin producing moulds, a safe moisture level should be achieved as rapidly as possible. Mechanical drying methods should be used instead of natural (open) air drying, where possible, to limit exposure of spices and dried culinary herbs to environmental contaminants and to prevent growth of moulds. If hot air drying is used, the air should be free of contaminants and precautions should be made to prevent combustion gases from contacting the plant material or stored plant material in the area.
- 5.2.2.2 Drying time should be controlled by using optimal drying conditions to avoid fungal growth, toxin production and over drying of source plant. The thickness layer of the drying source plant should be considered in order to consistently achieve a safe moisture level.
- 5.2.2.3 Excessive heating/drying of material should be avoided in order to retain its aromatic principles.

5.3 Cleaning of spices and dried culinary herbs

Spices and dried culinary herbs should be cleaned properly (for example, culled and sorted) to remove physical hazards (such as the presence of animal and plant debris, metal and other foreign material) through manual sorting or the use of detectors, such as metal detectors. Raw materials should be trimmed to remove any damaged, rotten or mouldy material. Debris from culling and sorting should be

periodically collected and stored away from the drying, processing and packaging areas to avoid cross-contamination and attracting pests.

5.4 Packing in the growing/harvest area

Packing activities can occur in the growing/harvest area. Such packing operations should include the same sanitary practices, where practical, as packing spices and dried culinary herbs in establishments or modified as needed to minimize risks. To prevent germination and growth of spores, the products must be dried to a safe moisture level prior to packing. When packing spices and dried culinary herbs in the growing/harvest area for transport, storage, or for further sale, new bags/containers should be used to prevent the potential for microbial, physical and chemical contamination.

When bags/containers are marked, food-grade ink should be used to minimize the potential for contamination with ink. When bags/containers have an open structure, such as jute bags, the bag/container should not be marked when filled with spices and dried culinary herbs to prevent liquid ink from contaminating the contents and increasing the moisture in the spices and dried culinary herbs. It is recommended that paper tags be used instead of liquid ink for marking. Removal of discarded plant material should be done on a regular basis in order to avoid accumulation that would promote the presence of pests.

5.5 Storage of the end-product

Spices and their products should be stored at a moisture low enough so that the product can be held under normal storage conditions without development of mould or significant deterioration by oxidative or enzymatic changes. An environment with a relative humidity between 55 and 60 percent should be maintained to protect quality and prevent mould growth. Where this is not practicable, spices should be packed in waterproof and gas-proof containers and stored in a proper warehouse. Finished products may be packed in gas tight containers preferably under inert gases like nitrogen, etc., or under vacuum in order to protect quality and retard possible mould growth. All products should be stored in clean, dry buildings, protected from insects, mites and other arthropods, rodents, birds, or other pests, chemical or microbiological contaminants, debris and dust.

5.6 Control of food hazards

5.6.1 Prevention of cross-contamination

Effective measures should be taken to prevent contamination of uncontaminated spices by direct or indirect contact with material at earlier stages of the processing. Persons handling raw materials or semi-processed products capable of contaminating the end product should not come into contact with any end-product unless and until they discard all protective clothing worn by them during the handling of the said raw material or semi-processed products and have changed into clean protective clothing. If there is a likelihood of contamination, hands should be washed and disinfected thoroughly before handling products at different stages of processing. Raw products that may present a hazard should be processed in separate rooms, or in areas physically separate from those where end-products are being prepared. All equipment which has been in contact with raw or contaminated materials should be thoroughly cleaned and disinfected prior to being used for contact with end-product.

5.6.2 Microbiological cross-contamination

Effective measures should be taken to prevent cross contamination of uncontaminated spices and dried culinary herbs by direct or indirect contact with potentially contaminated material at all stages of the processing. Raw products that may present a potential hazard should be processed in separate rooms, or in areas physically separate from those where end-products are being prepared. Spices and dried culinary herbs that have undergone a microbial reduction treatment should be processed and stored separately from untreated spices and dried culinary herbs. Equipment should not be used for both treated and untreated products without adequate cleaning and disinfection before use with treated products.

5.6.3 Physical and chemical contamination

Systems should be in place to prevent contamination of product by foreign bodies such as glass or metal shards from machinery, dust, harmful fumes and unwanted chemicals. In processing, suitable detection or screening devices should be used where necessary.

6 Maintenance and sanitation

6.1 Maintenance

The buildings, equipment, utensils and all other physical facilities of the establishment, including drains, should be maintained in an orderly condition. As far as practicable, rooms should be kept free from steam, vapour and surplus water.

6.2 Cleaning and disinfection

- **6.2.1** Establishments and equipment should be kept in an appropriate state of repair and condition to:
 - a) facilitate all sanitation procedures;
 - b) function as intended, particularly at critical steps (see paragraph 4.1);
 - c) prevent contamination of product, e.g. from metal shards, flaking plaster, debris and chemicals.
- **6.2.2** Cleaning should remove product residues and dirt which may be a source of contamination. The necessary cleaning methods and materials will depend on the nature of the bakery business. Disinfection may be necessary after cleaning.
- **6.2.3** Cleaning chemicals should be handled and used carefully and in accordance with manufacturers' instructions and stored, where necessary, separated from product, in clearly identified containers to avoid the risk of contaminating product.
- **6.2.4** Adequate precautions should be taken to prevent spices from being contaminated during cleaning or disinfection of rooms, equipment or utensils by water and detergents or by disinfectants and their solutions.
- **6.2.5** Detergents and disinfectants should be suitable for the purpose intended and should be acceptable to the official agency having jurisdiction. Any residues of these agents on a surface which may come in contact with spices should be removed by rinsing with potable water or rinsing and drying with steam before the surface or equipment is again used for handling food.
- **6.2.6** Either immediately after cessation of work for the day or at such other times as may be appropriate, floors including drains and orifices for the evacuation of liquid wastes, auxiliary structures and walls of handling areas should be thoroughly cleaned.

6.2.7 Changing facilities and toilets should be kept clean at all times.

6.2.8 Roadways and yards in the immediate vicinity of and serving the premises should be kept clean.

6.3 Hygiene control programme

A permanent cleaning and disinfection schedule should be drawn up for each establishment to ensure that all areas are appropriately cleaned and that critical areas, equipment and materials are designated for special attention. A single individual, who should preferably be a permanent member of the staff of the establishment and whose duties preferably should be independent of production, should be appointed to be responsible for the cleanliness of the establishment. He or she should have a thorough understanding of the significance of contamination and the hazards involved. All cleaning personnel should be well trained in cleaning techniques.

6.4 By-products

By-products such as trimmings, peelings, discards, etc. Not classed as waste material and which may have some future use should be stored in a manner to avoid contamination of food. They should be removed from the work zones as often as necessary and at least daily.

6.5 Storage and disposal of waste

Waste material should be handled in such a way as to avoid contamination of food or potable water. Care should be taken to prevent access to waste by pests. Waste should be removed from the spice handling and other working areas as often as necessary and at least daily. Immediately after disposal of waste, receptacles used for storage and any equipment which has come into contact with the waste should be cleaned and disinfected. The waste storage area should also be cleaned and disinfected.

6.6 Exclusion of animals

Animals that are uncontrolled or that could be a hazard to health should be excluded from establishments.

6.7 Pest control

- **6.7.1** There should be an effective and continuous programme for the control of pests. Establishments and surrounding areas should be regularly examined for evidence of infestation.
- **6.7.2** Should pests gain entrance to the establishment, eradication measures should be instituted. Control measures involving treatment with chemical, physical or biological agents should only be undertaken by or under direct supervision of personnel who have a thorough understanding of the potential hazards to health resulting from residues retained in the product. Such measures should only be carried out in accordance with the recommendations of the official agency having jurisdiction.
- **6.7.3** Pesticides should only be used if other precautionary measures cannot be used effectively. Before pesticides are applied, care should be taken to safeguard all spices, equipment and utensils from contamination. After application, contaminated equipment and utensils should be thoroughly cleaned prior to being used again.

6.8 Storage of hazardous substances

- **6.8.1** Pesticides or other substances which may represent a hazard to health should be suitably labelled with a warning about their toxicity and use. They should be stored in locked rooms or cabinets used only for that purpose and dispensed and handled only by authorized and properly trained personnel or by persons under strict supervision of trained personnel. Extreme care should be taken to avoid contaminating foods.
- **6.8.2** No substance which could contaminate food should be used or stored in spice handling areas.

6.9 Personal effects and clothing

Personal effects and clothing should not be left in spice handling areas.

7 Personal hygiene

7.1 Health status

Periodical medical examination of a food handler should be carried out.

- **7.1.1** People known, or suspected, to be suffering from, or to be a carrier of a disease or illness likely to be transmitted through food, should not be allowed to enter any food handling area, if there is a Likelihood of their contaminating food. Any person so affected should immediately report illness symptom of illness to the management.
- **7.1.2** If clinically or epidemiologically indicated and Immunization records maintained to ensure complete immunization for communicable diseases.
- **7.1.3** Conditions which should be reported to Management so that any need for medical examination and/or possible exclusion from food Handling can be considered, include jaundice, diarrhoea, vomiting, fever, sore throat with fever, Visibly infected skin lesions (boils, cuts, etc) and discharges from the ear, eye or nose and respiratory tract illness.

7.2 Personal cleanliness

- **7.2.1** Food handlers should Maintain a high degree of personal cleanliness, and where appropriate, wear Suitable protective clothing, head covering, and footwear. Cuts and wounds, where personnel are Permitted to continue working, should be covered by Suitable waterproof dressings.
- **7.2.2** Personnel should always wash their hands When personal cleanliness may effect food safety, for example:
 - a) at the start of food handling activities;
 - b) immediately after using the toilet; and
 - c) after handling raw food or any contaminated material, where this could result in contamination of other food items.
- **7.2.3** Personnel should avoid handling ready to eat Food, where appropriate.
- 7.3 Personal behaviour
- **7.3.1** People engaged in food handling activities Should refrain from behaviour which could result in contamination of food, for example, smoking, Spitting, chewing or eating, and sneezing or coughing over unprotected food
- **7.3.2** Personal effects, such as jewellery, bangles, Watches, pins or other items should not be worn or brought into food handling areas, if they pose a Threat to the safety and suitability of food.

7.4 Visitors

Visitors to food manufacturing, processing or handling areas should, where appropriate, wear protective clothing and adhere to the other personal hygiene provisions.

8 Transportation

Spice products should be stored and transported under conditions that maintain the integrity of the container and the product within it. Carriers should be clean, dry, weatherproof, free from infestation and sealed to prevent water, rodents or insects from reaching the products. Spice products should be loaded, transported and unloaded in a manner that protects them from any damage or water. Well insulated carriers or refrigerated vehicles are recommended for transport when climatic conditions indicate such a need. Extreme care should be taken to prevent condensation when unloading spice products from a refrigerated vehicle or while taking out of a cold storage. In warm, humid weather, the spices should be allowed to reach ambient temperature before exposure to external conditions; this may require 1-3 days. Spices that have been spilled are vulnerable to contamination and should not be used as food.

9 Documentation and records

- **9.1** Where necessary, appropriate records of processing, production and distribution should be kept and retained for a period that exceeds the shelf-life of the product. Documentation can enhance the credibility and effectiveness of the food safety control system.
- **9.2** Records should identify the source (or lot number) of incoming raw materials and link the source or lot to the lots of outgoing products to facilitate traceability/product tracing. Managers should ensure that effective procedures are in place to deal with any food safety hazard and to enable the complete, rapid recall of any implicated lot of the finished food from the market. Where a product has been withdrawn because of an immediate health hazard, other products which are produced under similar conditions and which may present a similar hazard to public health, should be evaluated for safety and may need to be withdrawn. The need for public warnings should be considered.
- **9.3** Recalled products should be held under supervision until they are destroyed, used for purposes other than human consumption, determined to be safe for human consumption, or reprocessed in a manner to ensure their safety.