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**Prerequisite programmes on food  
safety —**

**Part 6:  
Feed and animal food production**

*Programmes prérequis pour la sécurité des denrées alimentaires —*

*Partie 6: Production des aliments pour animaux*

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ISO copyright office  
Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
copyright@iso.org  
www.iso.org

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#).

The committee responsible for this document is ISO/TC 34 *Food products*, Subcommittee SC 17 *Management systems for food safety*.

ISO/TS 22002 contains the following parts under the general title *Prerequisite programmes on food safety*:

- *Part 1: Food manufacturing*
- *Part 2: Catering*
- *Part 3: Farming*
- *Part 4: Food packaging manufacturing*
- *Part 6: Feed and animal food production*

## Introduction

ISO 22000 sets out specific food safety requirements for organizations in the food chain. One such requirement is that organizations establish, implement and maintain prerequisite programmes (PRPs) to assist in controlling food safety hazards.

This Technical Specification does not duplicate the requirements given in ISO 22000 and is intended to be used when establishing, implementing and maintaining the PRPs specific to the organization(s) in conjunction with ISO 22000.

ISO/TC 34/SC 17 acknowledged the PAS 222:2011 as a starting point for the development of this Technical Specification.

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# Prerequisite programmes on food safety —

## Part 6: Feed and animal food production

### 1 Scope

This Technical Specification specifies requirements for establishing, implementing and maintaining prerequisite programmes (PRPs) to assist in controlling feed safety hazards in feed and animal food and in materials intended for use in the production of feed and animal food. Feed safety hazards in this context relate to attributes that have a potential to affect adversely animal and/or human health.

Prerequisite programmes are intended to ensure feed safety and to prevent, control and detect potential contamination including cross-contamination that could occur under the responsibility of the organization.

This Technical Specification is applicable to all organizations regardless of size, location or complexity that are involved in the manufacturing and/or supply of feed and animal food and wish to implement a PRP. Feed and animal food operations are diverse in nature and not all of the requirements specified in this Technical Specification necessarily apply to an individual organization or process. Where exclusions are made or alternative measures are implemented, these need to be justified by a hazard assessment and verified to be effective. Any exclusions or alternative measures adopted should not affect the ability of an organization to comply with other requirements contained in this Technical Specification.

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### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 22000, *Food safety management systems — Requirements for any organization in the food chain*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 22000 and the following apply.

#### 3.1 feed

any single or multiple products, whether processed, semi-processed or raw, which is intended to be fed to food producing animals

[SOURCE: CAC/GL 81-2013 — modified]

#### 3.2 animal food

any single or multiple products, whether processed, semi-processed or raw, which is intended to be fed to non-food producing animals

[SOURCE: CAC/GL 81-2013 — modified]

**3.3  
feed safety**  
concept that *feed* (3.1) and *animal food* (3.2) will not cause harm to animals and/or lead to *contamination* (3.5) of human food products

**3.4  
feed safety hazard**  
biological, chemical or physical agent in *feed* (3.1) and *animal food* (3.2), with the potential to cause an adverse health effect in animals and/or humans

**3.5  
contamination**  
introduction or occurrence of a *contaminant* (3.6) in *feed* (3.1) and *animal food* (3.2) or the production environment

[SOURCE: CAC/RCP 1-1969:1997, 2.3 — modified]

**3.6  
contaminant**  
any substance not intentionally added to *feed* (3.1) or *animal food* (3.2), which is present as a result of the production, manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such feed or animal food, or as a result of environmental *contamination* (3.5)

[SOURCE: CAC/GL 81-2013 — modified]

**3.7  
cross-contamination**  
*contamination* (3.5) from one type, item or lot or batch of *feed* (3.1) and *animal food* (3.2) to another

**3.9  
materials**  
any constituent part of *feed* (3.1) and *animal food* (3.2) and packaging materials

**3.10  
representative sample**  
sample in which any particular characteristics of the lot or batch from which it is drawn are maintained, in particular in the case of a simple random sample where each of the items or increments of the lot or batch has been given the same probability of entering the sample

**3.11  
rework**  
nonconforming and/or returned products suitable for reprocessing

EXAMPLE Pellet fines, screenings, quality defects and customer returns.

**3.12  
medications**  
substances applied or administered to any animal for therapeutic, prophylactic or diagnostic purposes or for modification of physiological functions or behaviour or the combination of such substances with *feed* (3.1) or *animal food* (3.2)

[SOURCE: Codex Alimentarius Commission Procedural Manual, 23: 2015 — modified]

**3.13  
zoning**  
defined area within an establishment where specific operating, hygiene or other practices may be applied to minimize the potential for *contamination* (3.5)

[SOURCE: PAS 222:2011 — modified]



## 4 Generic PRPs

### 4.1 Establishment

#### 4.1.1 General requirements

Establishments shall be designed, constructed and maintained in a manner that

- a) facilitates satisfactory performance of all operations,
- b) eliminate or minimize to acceptable level the feed safety hazards associated with those operations, and
- c) prevent contamination from the surroundings.

Establishments shall be maintained in good order. Vegetation shall be tended, removed or otherwise managed to address feed safety hazards. Establishments shall be designed, constructed and maintained to allow adequate drainage and cleaning to prevent contamination.

The establishment boundaries shall be defined and documented. Access to the establishment shall be managed to address feed safety hazards. Access by non-employees shall be controlled in a manner depending on the risk to feed safety. Where it is not feasible to control access to the establishment, measures to prevent contamination shall be taken.

Access points to bulk material receiving lines shall be identified and secured from unintended use and contamination.

#### 4.1.2 Environment

Potential sources of contamination from the local environment shall be considered. Measures taken to protect against potential sources of contamination shall be documented and reviewed for effectiveness.

### 4.2 Layout and workspace

#### 4.2.1 General requirements

Processes and workspaces shall be designed, constructed and maintained to control feed safety hazards.

#### 4.2.2 Internal design and layout

The establishment shall be designed so the movement of materials, products and people do not contribute to contamination.

Testing areas and laboratories shall be designed, located and operated to prevent contamination of materials and production areas of the establishment.

#### 4.2.3 Internal structures and fittings

Walls, floors and floor-wall junctions shall be cleanable and resistant to the cleaning system applied.

Standing water shall be prevented and/or removed.

Openings shall be designed and managed to prevent entry of foreign matter, precipitation and pests. This includes external openings for the transfer of materials within the establishment.

Roofs in manufacturing and storage locations shall be self-draining and shall not leak.

Ceilings and overhead fixtures shall be designed and maintained to prevent damage and build-up of dirt and condensation.

#### **4.2.4 Equipment**

Equipment shall be designed and located to permit access for operation, cleaning and maintenance.

All equipment used for producing or processing feed and animal food shall be fit for the purpose for which it is used.

#### **4.2.5 Mobile structures and equipment**

Mobile structures and equipment, including those which are used temporarily, shall be managed to prevent contamination.

#### **4.2.6 Storage**

Storage shall provide protection from dust, condensation, waste, pests and other sources of contamination.

Storage conditions shall be appropriate for the intended use of the material.

Temperature and humidity shall be controlled where necessary.

Storage areas for dry materials shall be kept dry and appropriately ventilated.

Measures shall be taken to prevent contamination when materials are stored directly on the floor.

Sufficient space shall be maintained between packaged materials and walls to allow inspection and pest control activities to be carried out.

Packaging shall be fit for purpose.

Hazardous compounds not intended for inclusion in feed and animal food shall be segregated and secured when not in use. Materials with restricted use shall be stored segregated to avoid cross-contamination or unintended use.

### **4.3 Utilities**

#### **4.3.1 General requirements**

The provision and distribution routes for utilities to and around processing and storage areas shall be designed to prevent contamination.

#### **4.3.2 Water supply**

All forms of water that come into direct contact with product contact surfaces or are included in feed and animal food, shall not introduce a feed safety hazard. When available, potable water should be used.

Use of reclaimed or recycled water shall be justified by a risk assessment. Reclaimed or recycled water shall have a separate supply system, identified and not connected to or otherwise prevented from refluxing into the primary or potable water systems.

Facilities for storage and distribution of water shall be designed to meet specified water quality requirements.

#### **4.3.3 Ventilation**

Production and storage areas shall be appropriately ventilated to prevent contamination.

Measures shall be taken to remove excess humidity and moisture appropriate to the type of facility.

Ventilation systems including intake ports and filters shall be inspected and maintained.

#### 4.3.4 Air and other gases

Air and gases that come into direct contact with feed and animal food, including those used for transferring, blowing or drying, shall not compromise feed safety.

Gases from combustion intended for direct contact with feed and animal food shall not compromise feed safety. The fuel used as the combustion source shall be fit for purpose.

#### 4.3.5 Lighting

Lighting shall allow personnel to carry out assigned feed safety responsibilities.

Light fixtures shall be designed in such a way to prevent contamination in the case of breakages.

### 4.4 Waste disposal

#### 4.4.1 General requirements

Systems shall be in place such that waste is identified, collected, removed and disposed of to prevent contamination. Waste shall be managed in a manner that prevents attraction and harbouring of pests.

#### 4.4.2 Waste handling

Containers for waste shall be

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- clearly identified for their intended use,
  - located in a designated area, and
  - designed to be effectively emptied.

Provision shall be made for the segregation, storage and removal of waste. Removal frequencies from production areas shall be managed to avoid accumulations. Waste accumulation shall occur only in designated areas.

Materials designated as waste shall be disposed of in a manner that prevents unauthorized use.

#### 4.4.3 Drains and drainage

Drains shall be designed, constructed and maintained so that contamination is prevented.

Drains shall have sufficient capacity to handle expected loads.

Drains should not be located such that materials would be contaminated if a leak occurred.

Open drainage direction shall not be from a contaminated area to a clean area.

Closed drainage direction should not be from a contaminated area to a clean area.

### 4.5 Equipment suitability, cleaning and maintenance

#### 4.5.1 General requirements

Equipment shall be fit for purpose, installed, maintained and managed to facilitate cleaning and maintenance.