

Australian Standard™

**Construction of premises and hygienic
production of poultry meat for human
consumption**



This Australian Standard was prepared by Committee FT-021, Meat for Human and Animal Consumption. It was approved on behalf of the Council of Standards Australia on 22 March 2006.

This Standard was published on 7 April 2006.

The following are represented on Committee FT-021:

ACT Health
Australian Chicken Meat Federation and Australian Poultry Industries Association
Australian Meat Industry Council
Australian Quarantine and Inspection Service (Commonwealth)
Australian Renderers Association
Department of Health, WA
Department of Primary Industries, Water and Environment, Tas.
Department of Primary Industry, Fisheries and Mines, NT
Food Standards Australia New Zealand
Meat & Livestock Australia
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This Standard was issued in draft form for comment as DR 04280.

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Construction of premises and hygienic production of poultry meat for human consumption

Originated as AS 4465—1998.
Previous edition 2001.
Third edition 2006.

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Published by Standards Australia, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 7370 2

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National Library of Australia Cataloguing-in-Publication

Australia and New Zealand Food Regulation Ministerial
Council. Food Regulation Standing Committee.

Australian standard for construction of premises and hygienic
production of poultry meat for human consumption: AS 4465:2005.

New ed.

ISBN 0 643 09261 7 (paperback).

ISBN 0 643 09269 2 (eBook).

1. Poultry industry – Standards – Australia. 2.

Slaughtering and slaughter-houses – Standards – Australia.

3. Meat industry and trade – Standards – Australia. I.

Title. (Series : FRSC technical report series no. 1).

664.9020994

Available from

CSIRO PUBLISHING

150 Oxford Street (PO Box 1139)

Collingwood VIC 3066

Australia

Telephone: +61 3 9662 7666

Local call: 1300 788 000 (Australia only)

Fax: +61 3 9662 7555

Email: publishing.sales@csiro.au

Web site: www.publish.csiro.au

Set in 10/12 Adobe Garamond

Typeset by James Kelly

Cover design by James Kelly

Printed in Australia by Metro Printing

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PREFACE

The Primary Industries Ministerial Council (PIMC) consists of the Australian Commonwealth, state, territory and New Zealand government ministers responsible for agriculture, food, fibre, forestry, fisheries and aquaculture industries/production and rural adjustment policy. This Council resulted from the amalgamation of the previous ministerial councils, the Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) and the Ministerial Council on Forestry, Fisheries and Aquaculture (MCFFA) that dealt with elements of these issues.

The agreed objective of the Council is to develop and promote sustainable, innovative and profitable agriculture, fisheries/aquaculture, food and forestry industries.

In March 1995, ARMCANZ determined that aspects of all existing national meat industry codes relevant to human health would be mandated by amendment of legislation in all states and territories.

The decision was given effect by the appointment of a steering group comprising chairpersons and chief executives of state and territory meat hygiene authorities, the Australian Quarantine and Inspection Service (AQIS), meat industry organisations, food safety technical advisers and the Australia New Zealand Food Authority (now Food Standards Australia New Zealand). This group was subsequently officially named the Meat Standards Committee (MSC).

After formation, MSC commenced a fundamental review of existing codes of hygienic practice to express mandatory national meat hygiene standards in outcome terms. The resulting Australian Standards provided for the implementation of quality assurance programs consistent with the AS/NZS ISO 9000:2000 series. Process control shall be achieved through the application of hazard analysis critical control point (HACCP) methodology as defined by the Codex Alimentarius Commission and shall allow flexibility in techniques and facilities provided that standards relating to wholesomeness and safety have been met.

'The responsibility for production of safe and wholesome meat should be shared by industry and the controlling authority. The use of the HACCP approach and quality assurance systems reinforces this joint responsibility. The controlling authority will supervise and audit these arrangements to ensure compliance with requirements' (Codex Alimentarius, Vol. 10, 1994).

This Standard is written in substantial compliance and consistency with *Codex Alimentarius Volume 10*. Minor technical variations reflect accepted Australian terminology or commercial practice, but with quality standards and performance criteria equivalent to those in *Codex Alimentarius Volume 10*.

Where an operator proposes a technique substantially different from that detailed in this Standard, MSC shall assess equivalence. MSC will establish the methodology for determining the equivalence of benchmarks or standards. The proposer of the alternative technique shall supply sufficient supporting information to validate the procedure to the relevant controlling authority whom will advise MSC. The submission must include a HACCP plan that ensures equivalence is maintained.

MSC now reports to PIMC for all non-food standards issues and to the Food Regulation Ministerial Council (FRMC) on food for human consumption issues. PIMC appoints the chairperson of MSC and administers the existing meat standards formed under the previous

ARMCANZ arrangements. Where MSC cannot reach agreement on the approval of an alternative technique the final decision shall be made by PIMC.

This publication has been approved as an Australian Standard and replaces the previous *Australian Standard for Construction of Premises and Hygienic Production of Poultry Meat for Human Consumption* (AS 4465:2001/Amdt 1–2003). Other standards in the series are:

Australian Standard for the Hygienic Production of Game Meat for Human Consumption.
AS 4464:1997

Australian Standard for the Hygienic Production of Rabbit Meat for Human Consumption.
AS 4466:1997

Australian Standard for the Hygienic Production of Crocodile Meat for Human Consumption.
AS 4467:1998

Australian Standard for the Hygienic Production of Natural Casings for Human Consumption.
AS 5011:2001

Australian Standard for the Hygienic Production of Ratite (Emu/Ostrich) Meat for Human Consumption. AS 5010:2001

Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption. AS 4696:2002

Australian Standard for the Hygienic Rendering of Animal Products. AS 5008:2001/Amdt 1–2003.

PRIMARY INDUSTRIES MINISTERIAL COUNCIL

The Primary Industries Ministerial Council (PIMC) consists of the Australian Commonwealth, state and territory and New Zealand government ministers responsible for agriculture, food, fibre, forestry, fisheries and aquaculture industries/production and rural adjustment policy. This Council resulted from the amalgamation of the previous ministerial councils (ARMCANZ and MCFFA) that dealt with elements of these issues.

PIMC is the peak government forum for consultation, coordination and, where appropriate, integration of action by governments on primary industries issues. The council first met in May 2002.

The agreed objective of the Council is to develop and promote sustainable, innovative and profitable agriculture, fisheries/aquaculture, food and forestry industries.

The Council is supported by a permanent Standing Committee, the Primary Industries Standing Committee (PISC), membership of which comprises departmental heads and chief executive officers of relevant Australian Commonwealth, state, territory and New Zealand government agencies.

The operational arrangements are consistent with the Protocols and General Principles for the Operation of Ministerial Councils agreed by the Council of Australian Governments (COAG) in June 2001.

1 SCOPE

Part A of this Standard applies to the construction and equipment of all processing premises where poultry are slaughtered for the production of poultry meat for human consumption. It contains the minimum construction requirements for premises used for the production of wholesome poultry meat.

Part B of this Standard applies to the hygienic production for human consumption of products derived from poultry. However, it does not apply to the retailing of poultry meat and poultry meat products.

This Standard is based on hazard analysis critical control point (HACCP) principles. Operators of poultry processing establishments should seek training in HACCP principles and then develop an establishment-specific quality assurance manual based on HACCP that meets or exceeds the minimum requirements of this Standard.

For the purpose of understanding how HACCP is implemented and audited in the Australian meat industry, poultry meat processors should refer to *A Guide to the Implementation and Auditing of HACCP*.

Alternate techniques or procedures to those detailed in the Standard may be used by operators providing that compliance with the overall goal can be verified by the use of HACCP-based programs.

Authorities with regulatory responsibilities for the processing of poultry for human consumption shall enforce compliance with this Standard.

This Standard is structured within a performance-based framework focussing on the need for product wholesomeness.

Whenever the words 'should' and 'shall' appear in this Standard they are to be interpreted as meaning desirable and mandatory, respectively.

The *Australian Standard for the Hygienic Production of Ratite (Emu/Ostrich) Meat for Human Consumption* applies to the slaughter and processing of emus and ostriches.

This Standard applies as the *Australian Standard for Construction of Premises and Hygienic Production of Poultry Meat for Human Consumption*.

Operation under this Standard implies compliance with the relevant *Model Code of Practice for the Welfare of Animals* and the *Model Code of Practice for the Welfare of Animals – Livestock at Slaughtering Establishments*.

2 DEFINITIONS

Approved	Approved by the controlling authority.
Approved person	A person appointed by the processing company to carry out the specified function as outlined under a quality assurance arrangement approved by the controlling authority.
Authorised officer	In the context of this Standard is defined as any technically qualified officer of the Commonwealth or of the appropriate state or territory government agency, or local government officer, who is specifically authorised under relevant Commonwealth or state or territory legislation governing the construction and conduct of premises and practices used for the processing of poultry meat for human consumption.
Bleeder	A person responsible for ensuring poultry on automatic bleeding lines are properly bled out.
Boning	Means the: (a) removal of poultry meat from the bones of a carcass, or portion of a carcass; (b) production of bone-in poultry meat cuts; or (c) production of boneless poultry meat cuts. Boning does not include the production of mechanically separated poultry meat.
Carcass	The whole dressed body of slaughtered poultry (the skeleton and attached musculature) excluding any part that has been removed from the dressed body (e.g. head, feathers, viscera, blood).
Clean	In relation to: (a) carcasses or poultry meat means free from all visible contaminants (e.g. ingesta, dust, faecal material and pathological conditions); (b) premises means surfaces of floors, walls, ceilings, equipment, appurtenances and utensils free of visible contamination, washed, sanitised, free of objectionable odours; and (c) clothing means free of visible contamination.
Condemned	A carcass or carcass part determined to be unfit for use for human or pet food and requiring destruction.
Contamination	The presence of objectionable matter, including substances or microorganisms, that makes poultry meat unwholesome.
Controlling authority	A person or a body that under the law of a state or territory or the Commonwealth has statutory responsibility for poultry meat hygiene.

Disease	In relation to poultry is the presence of an infectious agent or pathological process that: (a) affects the health of live poultry to an extent that would prevent acceptance of the poultry carcase, the poultry meat or the parts derived from the carcase for human consumption; or (b) may not necessarily affect the health of live poultry, but may be transmitted to other live poultry or humans who come into contact with the live poultry or the carcase or who might consume poultry meat from the poultry.
Edible	Suitable for human consumption.
Full-height walls	Floor to ceiling height.
Further process	Any process that alters the physical and/or chemical characteristic of that product.
HACCP	A hazard analysis critical control point approach that uses the seven principles defined by the joint Food and Agriculture Organization (FAO)/World Health Organization (WHO) Food Standards Program of the Codex Alimentarius Commission (Twentieth Session Geneva) and is a structured system of analysis of hazards that identifies methods of hazard monitoring and control measures for each hazard.
Inedible	Unsuitable for human consumption.
Operator	The person, owner or manager who at the time is in attendance and responsible for the operation of the registered premises.
Pet food	Poultry meat fit for animal consumption.
Potable	Means a water quality that is consistent with standards for drinking water in the respective state or territory and is consistent with the standards detailed in the <i>NHMRC/ARMCANZ Australian Drinking Water Guidelines (1996)</i> .
Poultry	Includes fowls, ducks, geese, turkeys, pigeons, pheasants, quails, guinea fowls and other avian species ordinarily consumed as food by man. For the purpose of this Standard, poultry does not include ratites (emu or ostrich).
Poultry meat	The edible part of any poultry that is intended for human consumption, whether in its natural state or prepared by freezing, chilling, preserving, salting or other process.
Prefabricated wall	Manufactured sections of wall produced in a standardised way prior to their assembly on site.
Quality assurance (QA)	All those planned and systematic actions necessary to provide adequate confidence that the product or service will satisfy given requirements for quality.
Quality assurance arrangement	An arrangement between the controlling authority and the operator of a processing premises with an approved quality system, where company management takes responsibility for ensuring the production of wholesome poultry meat. The controlling authority's role is to monitor the effectiveness of a company's approved QA system through an audit program to ensure compliance with the relevant provisions of this Standard.

Registered/ licensed	Premises registered in accordance with the requirements of the controlling authority.
Residues	Residues of veterinary drugs, pesticides and contaminants as defined for the purposes of <i>Codex Alimentarius</i> .
Sanitise	Apply approved chemical and/or physical agents or processes to cleaned surfaces to minimise risk of contamination of poultry meat by micro-organisms.
Sterilise	In relation to equipment or utensils used in the hygienic processing of animals, cleaned and immersed until sterilisation is effected, or treated by other effective means. For the purpose of this Standard it means 'make commercially sterile'.
Wholesome	Means: (a) will not cause food-borne infection or intoxication when properly handled and prepared for its intended use; (b) does not contain chemical residues in excess of established limits; (c) free of obvious physical contamination; (d) free of defects recognised as unsafe (objectionable) to consumers; (e) produced under adequate hygiene control.

PART A – MINIMUM STANDARDS OF CONSTRUCTION OF POULTRY PROCESSING PREMISES

3 ASSOCIATED RISKS

OUTCOMES REQUIRED

The design and construction of the premises shall facilitate the hygienic production of poultry meat by:

- preventing product contact with contaminating materials;
- enabling effective cleaning programs to operate;
- controlling ingress of contaminating materials and vermin; and
- providing adequate means of protecting product wholesomeness.

- 3.1 This Standard focuses on matters relating to the hygienic production of poultry meat.
- 3.2 Other relevant authorities will determine standards for construction integrity, energy, waste disposal requirements, occupational health and safety and environmental protection and should be consulted during planning.

4 SITE AND SERVICES

OUTCOME REQUIRED

Premises are located and provided with essential services to facilitate the hygienic processing of poultry.

- 4.1 Premises shall be located on a site:
 - (a) large enough for carrying out all the activities at that premises;
 - (b) well drained and not subject to flooding; and
 - (c) not affected by storm water, waste matter, or any noxious matter.
- 4.2 Premises shall be provided with:
 - (a) hot and cold potable water in such quantity and under such pressure as may be necessary to carry out any activity which may be conducted at that premises;
 - (b) reliable power supply adequate for all operations; and
 - (c) waste disposal systems sufficient to handle, and where necessary, treat all liquid and solid waste.
- 4.3 The immediate surroundings of the building shall be treated so that a low dust level is maintained. Access roadways, including vehicle loading and unloading areas, shall be sealed. Vehicle loading and unloading areas, vehicle cleaning areas and inedible material collection areas shall be paved and drained.
- 4.4 Holding areas for live poultry shall be sheltered, paved and drained and provided with adequate ventilation and cooling.

5 PREMISES CONSTRUCTION – GENERAL

OUTCOMES REQUIRED

- Construction facilitates orderly process flow and hygienic processing of poultry and prevents contamination of poultry meat.
- Drainage systems that effectively remove solid and liquid waste in a manner which does not jeopardise the wholesomeness of poultry meat.

- 5.1 Premises shall be adequate for the program of production and shall be provided with:
- (a) holding areas for live poultry which shall be sheltered, paved, drained and provided with adequate ventilation and cooling and shall comply with the *Model Code of Practice for the Welfare of Animals – Livestock at Slaughtering Establishments*;
 - (b) a room for stunning, bleeding and removal of feathers;
 - (c) a room for eviscerating and washing carcasses; the separation of this room from that referred to in (b) shall be by full-height walls except for necessary self-closing doors and approved openings sufficient for passage of product;
 - (d) ceilings in all internal sections of the processing premises;
 - (e) a room or rooms adequately constructed and equipped for keeping under refrigeration all the dressed poultry that is likely to be on the premises at any one time; and
 - (f) in the case of small operations (processing less than 30 000 poultry per month), the controlling authority may allow the construction and use of a premises with two physically separate sections – one for stunning, bleeding and defeathering and the second for the other processes – provided that an approved quality assurance program is in place.
- 5.2 The layout of the premises and its equipment shall facilitate the hygienic production of meat and any inspection or auditing necessary during or after production.
- 5.3 Equipment and materials used in construction shall be:
- (a) durable;
 - (b) non-toxic;
 - (c) smooth-surfaced;
 - (d) corrosion-resistant;
 - (e) impervious to moisture;
 - (f) resistant to or protected from impact;
 - (g) easily cleaned;
 - (h) resistant to chipping or flaking; and
 - (i) of a finish that makes contamination clearly visible.
- 5.4 Construction shall be designed to exclude:
- (a) the entrance of any animals not intended for use in meat processing, including dogs, cats, birds, rodents and insects;

- (b) any harbourage for vermin; and
- (c) environmental contaminants, including dust.

5.5 There shall be physical separation, such as full-height walls, between edible, inedible and pet food areas.

Roof

5.6 The roof shall be waterproof.

Walls

5.7 Walls shall be:

- (a) high enough for the operation conducted;
- (b) adequately coved to minimise accumulation of dust, water, litter or waste materials at floor junctions and wall-to-wall junctions; and
- (c) sealed at all joints and fixing devices.

Floors

5.8 Floors shall be:

- (a) non-slip, free from cracks, crevices and other defects and maintained in a safe condition; and
- (b) evenly graded so that liquids do not accumulate.

Drains

5.9 Drains shall be:

- (a) evenly graded;
- (b) able to contain the waste water within the drain and prevent contamination of product and storage materials;
- (c) directed to an external save-all or other approved means of removing solids and suspended fats that shall have paved and drained surrounds and be capable of being readily cleaned; and
- (d) vented to the outside and equipped with rodent screens.

5.10 Box drains shall be:

- (a) covered by a removable grating; and
- (b) capable of being effectively cleaned.

Ceilings

5.11 Ceilings shall be:

- (a) profiled to exclude the accumulation of dust and dirt, and minimise condensation;
- (b) effectively sealed at joints and fixing devices; and
- (c) sufficiently high to enable effective processing and minimise condensation and the accumulation of steam and vapour.

Passageways and doors

- 5.12 Openings to the exterior from an edible product area shall have self-closing, close-fitting doors and be provided with suitable devices to effectively prevent the entry of insects and/or other vermin.
- 5.13 Strip type PVC curtains shall only be used on openings through which packaged products pass and shall not be used instead of doors to the exterior.
- 5.14 Passageways and doorways through which product is transferred by rail or trolley shall be of sufficient width to prevent contact with the product.

Stairways and walkways

- 5.15 Stairs and walkways positioned over conveyor belts or any part of the processing system shall have:
 - (a) solid treads;
 - (b) closed risers; and
 - (c) solid side curbs that will prevent product contamination by splash or fallout.

Windows

- 5.16 Windows that open shall be screened to prevent the entry of insects with screens easily removed for cleaning.
- 5.17 Where windows face an area which produces noxious odours or airborne matter they shall be of non-opening type.
- 5.18 Location of windows shall be such that in the event of glass shattering, risk to product is prevented.

Ventilation

- 5.19 Adequate ventilation shall be provided to prevent accumulation of excessive heat, steam, condensation and the entry of odours, dust, vapour or smoke. The air intake for mechanical ventilation systems shall be located to avoid the intake of contaminated air.
- 5.20
 - (a) The discharge from air conditioners, evaporative coolers and the like shall be controlled to prevent the contamination of poultry meat, product contact surfaces and personnel.
 - (b) Condensate from refrigerant lines and water from drip trays shall be carried to floor level and directed to drains.

Lighting

- 5.21 Lighting at workplaces is adequate for operations conducted.
- 5.22 Shatterproof protective shields shall be provided over exposed lights.
- 5.23 Light fittings shall be of a type that minimise the collection of dust.

Electrical fittings

- 5.24 Electrical conduits and fittings shall be sealed to the wall or be sufficiently clear to permit effective cleaning of the space between the fitting and the wall and shall be approved by the relevant authority.