Ostrich and Emu Standards Council

Ostrich and Emu Processing Standard 5

Amendment 1 September 2002

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Preface

This industry standard contains instructions and guidelines to be followed when processing Ostrich and Emus for human consumption. It represents the minimum standards with which the industry must comply to ensure the production of Ostrich and Emu products.

OEPS5 has been developed by the Ostrich and Emu Standards Council. This Council comprises representation from the New Zealand Emu Farmers Association, New Zealand Ostrich Association, the Post-Farm Gate Group (processors and marketing), and New Zealand Food Safety Authority.

OEPS5 should be considered as an interim standard that provides the outcomes and principles for the processing of Ostrich and Emu meat. It is likely that amendments will be required as the processors gain more experience in Ostrich and Emu processing and as new technologies and methods are applied.

OEPS5 applies to Ostrich and Emu meat produced for the domestic market, and will be used as the base standard when market access is negotiated with importing countries.

OEPS5 and the associated standards will apply to establishments processing Ostriches and Emus subject to the Food Act 1981 and its pursuant regulations until such time that the Meat Act 1981 is repealed and replaced by the Animal Products Act 1999. Part 2 of the Animal Products Act requires processors to develop risk management programmes. This standard may form a helpful basis for this. Businesses commencing the slaughter and dressing of Ostrich and/or Emu from November 2000 are required to develop and have registered a risk management programme.

The Animal Products (Ancillary and Transitional Provisions) Amendment Act 2002 requires primary processors (slaughter and dressing) of Ostrich and Emu meat to register a risk management programme by 1 July 2004.

Tony Zohrab

Director Animal Products

New Zealand Food Safety Authority

Ross Davies

Chairman
Ostrich and Emu Standards Council.

Amendment Record

Amendments to this Industry Standard will be given a consecutive number and dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

Amendment	Date	Entered	Amendment	Date	Entered By
No.		By	No.		
0	November 1998	MAFReg (M&S)	21		
1	September 2002	NZFSA	22		
2			23		
3			24		
4			25		
5			26		
6			27		
7			28		
8			29		
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19			40		
20			41		

1 Introduction

Background

The principle goal of this Ostrich and Emu processing standard is to produce Ostrich and Emu meat for human consumption and to minimise the potential food safety hazards associated with Ostrich and Emu. This standard recognises the major elements in the process and identifies food safety objectives for each of the sections. Several principles are outlined for processing Ostrich and Emu which are based on the application of Hazard Analysis Critical Control Points (HACCP) principles. This Ostrich and Emu Processing Standard 5 (or OEPS5) also allows for the adoption of alternative processing methods, if validated within the terms of IS/IAS 8, Section 4.

Scope

This standard relates to the pre-slaughter, slaughter and dressing and post slaughter handling of Ostrich and Emu meat to the extent that Ostrich and Emu meat product (or where appropriate, Ostrich and Emu byproducts) is suitable for further processing or to enter commerce.

1.1 Outcome

Produce Ostrich and Emu meat for human consumption and minimise the microbial, physical and chemical contamination of Ostrich and Emu meat.

1.2 Definitions

Apparently healthy/healthy refers to a bird that does not show evidence of disease or defect which might affect its suitability for human consumption as judged by a competent person.

Approved means by the Director-General of Agriculture and Forestry, as delegated to the Director Animal Products.

Clean means the absence of visible contaminants on food or byproduct contact surfaces or surrounding walls, floors, equipment or protective clothing.

Competent person means a person with any specific competency as defined in any standard, specification or requirement, who may provide expert technical advice within the scope of the particular standard, specification or requirement (as for IS/IAS6 and IS/IAS8).

Minimise is to have taken all practical steps to substantially reduce the potential hazard of concern.

Shall expresses a mandatory requirement.

Should/may expresses a recommended provision which when followed may assist in achieving the required outcome.

Washed means the use of flowing potable water to remove visible contamination.

1.3 Principles

1.3.1 The production of Ostrich and Emu products and byproducts shall be documented according to IS/IAS 8, Section 4: Documented Systems.

Documentation shall cover the health of live birds, the welfare of birds during transport and slaughter, humane slaughter, pre-slaughter requirements, dressing and post slaughter handling and further processing.

- 1.3.2 Any biological, chemical or physical substance or agent of live birds that may result in harm to people shall be minimised through the application of effective pre-harvest practices.
- 1.3.3 The slaughter and dressing of birds shall be performed in a manner consistent with good manufacturing practice and shall at all times minimise microbial contamination of carcasses and product.
- 1.3.4 Post-slaughter handling and processing of carcasses and products shall focus on minimising proliferation and re-distribution of micro-organisms.

1.3.5 Customised Processes, Experimentation, Hazard Analysis and Critical Control Point Systems (HACCP) and New Technology

Where any outcome required by this manual can be achieved using alternative general or specific principles to those outlined for a particular outcome, then the alternative principles are permitted provided they are fully validated within the premises documented quality assurance programme, within the context of IS/IAS 8, section 4, and approved by MAF in accordance with IS/IAS 8, Section 4. Compliance is also required with all other relevant regulatory requirements.

1.4 Cross References

- 1.4.1 Premises shall be licensed according to the requirements of *Manual 1: Licensing or be subject to Part 2 of the Animal Products Act 1999*.
- 1.4.2 Premises shall be designed and constructed according to the requirements of *IS/IAS2: Design* and Construction.
- 1.4.3 Premises hygiene and sanitation shall conform to the requirements of *IS/IAS3: Hygiene and Sanitation*.
- 1.4.4 Further processing, including non-meat ingredients, thermal processing, drying, acidification and wrapping and packaging shall conform to the requirements of *IS/IAS6: Processing of Edible Product*, as required.
- 1.4.5 Collection and preparation of inedible byproducts shall conform to the requirements of *IS7: Byproducts*.
- 1.4.6 Quality assurance systems shall be developed according to the principles in *IS/IAS8: Quality Assurance*.
- 1.4.7 Transport of products shall conform to the requirements of IS9: Storing and Transport.

- 1.4.8 The export of products shall conform to the requirements of Overseas Market Access Requirements, as referenced by the *Official Assurances Programme* and any relevant overseas market access requirements.
- 1.4.9 The post-mortem examination of birds shall conform to the requirements of *Manual 16*.

1.5 Layout of Manual

1.5.1 Scope

Each section commences with a scope which broadly describes the activity to which the requirement applies.

1.5.2 Outcome

The outcome is the principal requirement. It is a statement of what is intended to be achieved and is a fundamental component of the New Zealand system for ensuring safety of food derived from animals, excluding fish, minimising hazards associated with byproducts and compliance with importing country requirements. It provides a basis for determining equivalence of alternative general or specific principles with the New Zealand standard.

1.5.3 General Principles

The general principles described in the manual establish the fundamental principles that will achieve the required outcome.

1.5.4 Specific Principles

The specific principles are subsequently detailed to provide an additional guide which support the general principles. The principles described in the manual are based on either validated data or good manufacturing practice. Alternative processing methods, fully validated within the premises' documented quality assurance programme in the context of IS8, Section 4 are permitted.

International recognition of any procedure described in this standard may differ from country to country and specific importing country requirements should be consulted.

There are no headings which identify specific principles. A specific principle will be identified as any major heading (with two-digit numbering and in a bold 14 pt typeface) which occurs in sequence after general principles.

1.5.5 Explanatory Notes

Any text which has been enclosed in a single bordered box does not form part of the standard.

It is generally an explanatory note which is intended to expand the general intent of the particular requirement and may serve to clarify compliance with the requirements in some circumstances, in other cases they act as qualifiers to indicate that the proposed standard is not yet able to be utilised or that further development is required.

They have been positioned immediately after the section to which they apply.

1.5.6 Director-General

Wherever it is a requirement in this standard to report to, or seek the approval of, the Director-General then the requirement shall be addressed to the Director Animal Products, New Zealand Food Safety Authority, PO Box 2835, Wellington.

1.6 Hazard Analysis Critical Control Points (HACCP)

1.6.1 Documented Pre-requisite Programmes

Every premises is to have a documented HACCP plan together with the following prerequisite programmes.

- potable water quality;
- sanitation and hygiene of premises and equipment;
- operator hygiene including protective clothing requirements, personal equipment;
- and use of amenities;
- training;
- dropped meat;
- food contact materials includes packaging materials;
- incoming materials, e.g. ingredients, additives etc;
- repairs and maintenance;
- chemicals;
- vermin control;
- waste disposal;
- whole flock health scheme and on-line quality checks; and
- storage and transport.

RMP developers will need to consider application of HACCP to supporting systems. Consult the following guidance on the NZFSA website:

 $\underline{http://www.nzfsa.govt.nz/meatdoc/meatman/haccp/meat/index.htm}$

The NZFSA HACCP Guidelines and the Industry Standards are available from:

Manor House Press Limited

PO Box 38-071

Wellington Mail Centre

Telephone: 04 568-6071 or 04 568-8914

Facsimile: 04 568-7282

Email:

Office@manorhouse@net.nz

or http://www.nzfsa.govt.nz

The Animal Products Act 1999 introduced the requirement for primary processors (slaughter and dressing) to implement and register a Risk Management Programme. For further information on risk management programmes go the following website:

 $\underline{http://www.nzfsa.govt.nz/animalproducts/subject/rmp/index.htm}$

Those wishing to export to the United States are likely to be required to comply with the Technical Directive, which references MISC Circular 99/MISC/7.

http://www.mia.co.nz/misc_circulars.htm

(NB there is an "_" between "misc" and "circular" in this hyperlink.)

2 Pre - Slaughter

Hazard - this element defines the potential for pathogens of enteric origin and residues of agricultural and environmental chemical substances.

2.1 Outcome

Only apparently healthy, live birds shall be presented for slaughter and processing.

2.2 Principles

2.2.1 General Health

Every premises shall maintain a register of suppliers who shall provide to the licensee records containing evidence of the health status of the flock.

Evidence relating to the health status of the flock destined for slaughter should include (but not restricted to):

- (1) Consignor, farm name and address, contact details;
- (2) Age of bird(s);
- (3) Sex of birds(s);
- (4) Any identifying mark(s);
- (5) Disease or animal health status: including recent veterinary visits and/or treatments, including usage of registered veterinary medicine (veterinarian prescribed or over the counter);
- (6) Any wounds, discharges, musculoskeletal damage apparent on loading to slaughter premises, but not impacting on animal welfare considerations;
- (7) Exposure to any other chemicals (pesticides, herbicides, or other environmental contaminants); and
- (8) Microchip location.

2.2.1.1 Evidence of the disease status of birds shall be either:

- (a) In the form of records of an effective whole flock health scheme under the supervision of a competent person; **or**
- (b) Evidence provided by a competent person from examinations carried out at the farm of supply.

Competencies for the *competent person* would include (but not be limited to) demonstrable knowledge of:

- (a) the ability to recognise the specific diseases and conditions affecting Ostriches and Emus, and the ability to take appropriate action; and
- (b) the use, dosages, broad effects, and withholding periods for the animal remedies licensed for use with Ostriches and Emus, and the ability to administer the license animal remedies as required under the supervision of the veterinarian or as stipulated on the licensed animal remedy's label; and
- (c) the development, maintenance, implementation and monitoring of quality systems for the production farm.

2.2.2 Live Birds Submitted For Slaughter

Only live birds shall be consigned to the slaughter premises. Birds that are apparently unhealthy shall not be sent to any slaughter premises.

2.2.3 Only Apparently Healthy Birds Shall Be Slaughtered

- 2.2.3.1 Birds shall appear healthy to the licensee on receipt of the birds at the slaughter premises.
- 2.2.3.2 Birds that have suffered musculoskeletal trauma during transportation may be slaughtered.
- 2.2.3.3 The operator of a processing premises shall have in place a system which ensures that:
 - (a) live Ostrich and Emu shall be treated humanely;
 - (b) Ostrich and Emu found dead on arrival shall be disposed so as to prevent the carcass coming in contact with product; and
 - (c) moribund, unhealthy or rejected birds shall not be processed.
- 2.2.3.4 Refer to Appendix A2 for the *Ostrich and Emu ante-mortem inspection* procedures and conditions.

2.2.4 Time of Slaughter

2.2.4.1 Apparently healthy birds shall be slaughtered expeditiously on arrival at the slaughter premises.

Confinement has been shown to increase the shedding of enteric pathogens.

2.2.5 Welfare

The welfare of birds shall be paramount during confinement and transportation to the slaughter premises.

The Animal Welfare Act 1999 regulates the welfare of animals, including humane slaughter.

The publication 'AWAC Code of Recommendations and Minimum Standards for the Welfare of Animals Transported in New Zealand' (AWAC Code 15) [November 1994 and any subsequent amendments] with particular reference to Section 21 (1997) gives the minimum guidelines for the transportation and handling of animals.

Refer also to AWAC Code of Animal Welfare No. 21 - *Code of Recommendations and Minimum Standards for the Welfare of Ostrich and Emu* for additional information.

3 Slaughter and Dressing

3.1 Outcome

Microbiological contamination of the carcass is minimised during the slaughter and dressing of Ostrich and Emu.

3.2 Principles

3.2.1 Slaughter Regulations

- 3.2.1.1 All Ostrich and Emu shall be killed humanely. An approved and humane backup method of stunning shall be readily available.
- 3.2.1.2 Stunning and slaughter methods have not been specifically prescribed and the particular method employed shall be approved by the Director-General in every case.

It is likely that specific methods of stunning and slaughter will need to be approved as 'minimum standards' under the Animal Welfare Act 1999.

These will develop over time as more experience is gained by the industry, domestically and internationally. That would take the form of a mandatory standard. However, should a processor provide sufficient scientific support, the Director-General *could* approve an alternative method (via the mechanisms in IS8).

This whole section 3.2.1 is *provided without prejudice* to future developments in both the law and processes used in industry.

The following Guidelines for stunning of Ostriches is from 'The Production and Slaughter of Ostriches in South Africa':

- A stunning pistol is <u>not</u> practical.
- Electrical stunning at 120 milliamperes and 220-230 volt for 2-4 seconds is recommended. A time limiting device to limit stunning time should be installed.
- Restraining, stunning and hoisting actions must not be visible to Ostriches waiting to be slaughtered.
- 3.2.1.3 Live Ostrich and Emu that are rejected at pre-slaughter examination shall be humanely killed in such a way to avoid contamination of floors, walls, equipment and product.

In every case, the licensee must ensure that the birds are slaughtered humanely (or humanely euthanased, as appropriate), and that every premises has a documented system detailing the slaughtering process(es), including checks for consciousness of birds when appropriate.

3.2.2 Humane Treatment

Processing shall not commence until the birds have been *either* stunned and humanely slaughtered or *humanely slaughtered without stunning*.

The concept of humanely slaughtering without stunning is *not widely accepted* within animal welfare circles. This section *urgently* needs revisiting in line with animal welfare legislation.

This section is provided without prejudice.

3.2.3 Scalding (if applicable)

- 3.2.3.1 Birds shall be dead and bleeding shall be substantially completed before scalding.
- 3.2.3.2 Where a wetting agent is added to scald water it shall be an approved chemical (Manual 15) and used according to the manufacturers instructions.

Scalding of carcasses is not mandatory. If scalding is used, section 3.2.3 provides the requirements and guidelines.

Where *manual scalding* is performed, the scald water should be replaced on a regular basis, or have a continuous water supply and overflow that minimises contamination.

When *scalding sprays or steam jets* are used, they should be sufficient in number and type to maintain an adequate scalding operation.

The rate of flow of potable water into the scald tank should be adequate to maintain a sanitary scalding operation. The rate of flow depends upon the species and number of birds per minute passing through the scald tank.

As a minimum requirement, all scald tanks (irrespective of the nature of processing) should be emptied and cleaned at the end of each day's operations.

3.2.4 Dressing

3.2.4.1 *Defeathering*

Defeathering shall be carried out in a manner which minimises avoidable contamination of the carcass.

The plucking of live Ostriches and Emus shall not be permitted in any licensed premises.

Feathers may be removed by either dry hand plucking or clipping with electrical or mechanical shears or clippers.

Mechanical pluckers, if used, should be installed as to be accessible for thorough and regular cleaning and for the removal of any accumulated feathers and contamination, and should be constructed to prevent the scattering of feathers.

Continuous collection and removal of feather from the defeathering and/or scalding areas should be carried out without contamination of the product or processing area.

3.2.4.2 Flaying (deskinning)

Where Ostrich and Emu are intended to be skinned the principles of hygienic dressing outlined in IS5: Slaughter and Dressing shall apply.

Skinning

- 1. The skin is incised from the sternum to anus (cloaca) then laterally from center to leg hock joint. The skin is then removed from front to back.
- 2. If the neck is removed from the carcass at this time, it must be positively identified with the carcass until final (post-mortem) inspection.
- 3. The skin is removed from the legs and the hock joints on both sides.
- 4. The skin should be removed from the processing area (refer IS3).

3.2.4.3 *Waxing*

If feathers are removed by waxing methods, the principles given in PIPS5, section 3.2.4 apply.

3.2.5 Washing (also known as post defeather or pre-evisceration wash)

- 3.2.5.1 Birds may be washed after defeathering. If so, this must occur before any further incision is made in the carcass.
- 3.2.5.2 Before evisceration the outer surface of each Ostrich and Emu carcass may be washed. If so washed a spray or constant flow of potable water or chlorine solution or a solution of another approved chemical is to be used.

The purpose of the pre-evisceration wash is to have the outside of the bird wet, so that the rate of attachment of micro-organisms is reduced. Reducing the ability for the micro-organisms to attach to the carcass has a greater effect on reducing contamination than relying on chemical intervention.

3.2.6 Removal of Microchip

- 3.2.6.1 Where the Animal Status Declaration (refer OMAR 01/184) clearly indicates in the "Tallies, species/class, marks/brands" section that the birds in a consignment do not have microchips inserted for identification, no scanning is required.
- 3.2.6.2 Where the Animal Status Declaration does not clearly identify the absence of microchips in the birds in a consignment in the manner prescribed in 3.2.6.1, thorough scanning must be undertaken to locate the microchip. The microchip must be removed following location.

The incoming records should identify the likely location of any microchip(s).

A system of inventory control for the microchip(s) should be in place so that all incoming microchips can be reconciled with the actual number found, and that (if required) the microchips and other relevant date can be traced to the individual birds.

The performance, maintenance and use of microchip scanners should be part of the premises QA programme.

3.2.7 Evisceration

- 3.2.7.1 Evisceration shall be performed in a manner that contamination of the carcass does not occur, and that the internal organs shall be presented in a manner to facilitate inspection.

 The premises documented quality assurance programme would set action limits and critical limits for the tolerable failure rate, and set actions to be taken when the tolerable failure rate is exceeded.
- 3.2.7.2 Ostrich and Emu shall be eviscerated within one hour of being slaughtered.

3.2.7.3 *Venting*

The pericloacal skin shall be trimmed so as to prevent contamination of the carcass or cross-contamination.

Venting

The cloacal (anal) area provides a high risk to product safety due to its function and the nature of the cloacal contents.

The pericloacal skin is trimmed and removed from the carcass so as to prevent contamination of the carcass and other product or equipment.

The cloaca is carefully circle cut and freed from the carcass.

The area should then be hooked, bagged and securely tied to prevent spillage of the cloacal contents and cross contamination, then carefully lowered into the anal area/pelvic cavity.

Evisceration - General

A facility for the rinsing of hands and implements used during the evisceration process should be provided.

Tables or benches that become contaminated during manual evisceration processes should be cleansed before further carcasses are processed.

Containers used for the collection of viscera should be emptied on a continuous basis.

Viscera must be retained for post mortem inspection.

3.2.8 Offals

Offals shall be chilled to minimise microbial proliferation and handled in a manner to minimise environmental microbial contaminants.

- 3.2.8.1 All offals that are saved for human consumption during the evisceration process shall be removed, collected and handled in a way that prevents contamination of other products and equipment.
- 3.2.8.2 Offals shall be washed under potable water before chilling.
- 3.2.8.3 All offals shall be inspected and then treated in accordance with the disposition given in Appendix 3-2 .

3.2.8.4 Offals shall be continuously chilled to +4°C or cooler after their removal from the viscera (unless a premises specific process approval is granted, in which an alternative process has been validated).

Separation and recovery of offals and cleaning of offals should be performed in a manner that avoids contaminating the product, other products and surrounding surfaces.

3.2.9 Wing Removal

3.2.9.1 Wing removal should be done is such a way that prevents contamination to the carcass meat and the surrounding skin.

3.2.10 Sanitation

All equipment, including hands, shall be kept clean to minimise cross contamination (refer specific sections of IS3).

3.2.11 Post Evisceration Washing (also known as final wash)

After evisceration, the inner and outer surface of all carcasses may be washed in running potable water and/or an approved sanitiser, to remove any contamination before undergoing any chilling regime.

The purpose of post evisceration washing is to ensure that the carcass is free from visual contamination.

Spray washes

Sprays used for Ostrich and Emu washing should ensure thorough washing inside and outside the carcass.

The water volume should be regularly monitored to ensure effectiveness.

Processors are reminded to consult any relevant market access requirements, to determine if any wash requirements are specified.

3.2.12 Examination - Carcass Fit For Human Consumption

- 3.2.12.1 Any carcass or product showing signs of disease or defect that would render the product unfit for human consumption shall be removed from the food chain before chilling starts.
- 3.2.12.2 Diseased or defective carcasses may be removed at any stage prior to chilling.
- 3.2.12.3 The dispositions for Ostrich and Emu meat for human consumption shall be as given Appendix 3-2 to this Standard.
- 3.2.12.4 The head shall be retained and shall correlated with the carcass until both undergo post mortem inspection, and the appropriate disposition is made.
- 3.2.12.5 The minimum procedural requirements for post-mortem inspection of Ostriches and Emus are given as Appendix 3-2.

The number of suitably trained company personnel performing the examination should be determined by the individual premises, but should be sufficient in number to ensure that unhealthy, diseased, or otherwise unsuitable Ostrich and Emu is removed from production.

4 Post-Slaughter (includes chilling)

Care should be taken to prevent recontamination with pathogens of enteric origin and primary contamination from pathogens of environmental origin.

4.1 Outcome

Carcasses shall be chilled to minimise microbial proliferation and handled in a manner to minimise environmental microbial contaminants.

Microbial contamination and proliferation are controlled by chilling and hygienic handling

The Principles and requirements for the hygienic post slaughter treatment of Ostrich and Emu meat are found in *IS6: Processing of Edible Product*.

Appendix A-1

Ante- and Post-Mortem Examination of Animals and Birds

The following Competency Specification for persons undertaking ante- and post-mortem inspection was taken verbatim from Technical Directive 98/133 (dated 31 July 1998).

It is a mandatory instruction issued by the (then) Chief Meat Veterinary Officer (now Director Animal Products), and has the weight of law for the interim period until the specifications under the Animal Products Bill are promulgated.

Chief Technical Officer (CTO): For the purposes of this technical directive the CTO is the Director of Animal Products.

1. Background

New Zealand has operated internationally recognised and traditional organoleptic meat inspection procedures for many decades. Almost all the biological hazards causing food borne illness in New Zealand are microscopic and cannot be detected by organoleptic inspection. Furthermore this traditional form of inspection tends to detect diseases and defects that do not constitute a hazard to public health and are of an aesthetic nature only. They affect commercial acceptability of the product rather than public health.

It is increasingly acknowledged that the primary responsibility for the safety and quality of food belongs with the producer and processor. They should design and implement food safety programmes in accordance with specified principles to promote the integrity of their products. The government retains accountability for food safety by stipulating the principles, mandating certain procedures and auditing compliance by the various players.

This calls into question the current requirement that the inspection of animals, carcasses and offals for diseases and defects be carried only by government employees. All other quality control functions within the food industry are carried out by trained employees of the processor, subject to government oversight through audit. Over a period of time the government has devolved a number of quality control functions that were at some stage conducted by government employees, e.g. cartoned meat checks, cleanliness of stock in the yards, shipping container examination. It is considered that ante-mortem of animals and post-mortem examination of carcasses and offals is a function that ought to be performed by industry using trained, competent employees or contracted personnel of the processing company.

The qualifications and training required of these persons will be prescribed by New Zealand Food Safety Authority.

2 Training and Competencies

- 2.1 Persons carrying out ante-mortem and post-mortem examinations shall:
- 2.1.1 hold a qualification which covers the curriculum in Appendix A-2 (to this Standard)
 - Veterinary degrees and existing MAF VA and ASURE and AQIS meat inspector certificates are recognised as equivalent.
 - The qualification may be species specific, ie covering only those species for which the person is employed to examine.
- 2.1.2 hold a 'Statement of Competency' issued by the Technical Supervisor of the Verification

Agency.

Statements of Competency

The relevant persons must be competent to carry out the prescribed duties. Each person shall have a statement of competency, endorsed by the Technical Supervisor of the verification agency, and made available for audit. Additionally, where the prescribed duties require the use of statutory powers, the details of the appointments are to be entered in the statement. The statement of competency is to be renewed biennially, or sooner if non-performance is identified, or there is a permanent change of the Technical Supervisor.

Any person providing a statement of competency accepts accountability for the judgement being made. Should the statement be shown to be provided without evidence of a detailed assessment having been conducted, then the grantor may be held partially responsible for any subsequent failure to meet the standards and specifications.

The statement of competency is formal acknowledgement by the provider that the holder is:

- suitably qualified;
- appropriately trained;
- capable of carrying out the prescribed duties;
- part of a skills maintenance programme;
- correctly appointed to use statutory powers appropriate to the prescribed duties.

The CTO may specify competency requirements as a condition of granting statutory appointments, and/or within the training curriculum, and/or as a pre-requisite for undertaking any statutory requirement regardless of the actual use of statutory powers.

- 2.2 The employer of these persons shall ensure that a skills maintenance programme is documented and implemented. The programme shall:
 - operate on an on-going basis
 - use trained assessors
 - define procedures for assessing competency
 - define corrective actions which identify and effectively resolve performance deficiencies
 - provide for records.
- 2.3 The Technical Supervisor will verify the effectiveness of, and compliance with, the programme in 2.2.
- 2.4 Trainees

Trainees may carry out product examinations provided they are under the direct supervision of a qualified, competent person. The latter is accountable for the decisions that are made.

3 Devolution of Ante-mortem and Post-mortem Examination Responsibilities to the Licensee

This section is currently inoperative. It will become effective on a date to be notified by the CTO and is subject to the Animal Products Act . In the meantime the Crown is the sole provider of ante-mortem and post-mortem services.

3.1 The licensee is responsible for ante-mortem and post-mortem examinations. The trained, competent persons may be employed or contracted by the licensee. This service is separate

from, and not covered by, Technical Directives 01/119 & 01/120. Some foreign governments may dictate that the examinations be done by an independent government agency.

- 3.2 The licensee shall not use persons to carry out these examinations unless they are qualified and have a statement of competency in accordance with 2.1.
- 3.3 The licensee shall operate a skills maintenance programme as per 2.2 for his own employees.

4. Implementation

1 November 1998.

Appendix A-2

Ante -Mortem Inspection of Ostrich and Emus

- A2.A Following is the ante-mortem inspection procedures derived from the [Draft] Australian standard for hygienic production of Emu meat for human consumption (September 1997).
- A2.B This specification shall be applied for both Ostrich and Emus slaughtered for human consumption. Refer to IS4 for the general procedures for ante-mortem inspection.
- A2.C This specification is provided without prejudice to either changes in legislation; regulatory and/or industry development; an improvement knowledge of inspection procedures for Ostriches and/or Emus; and improvements/recognition of the animal health status of Ostriches and Emus.
- A2.D Some export markets may have different requirements for ante-mortem inspection of Ostriches and Emus.

A2.1 Outcome

That only apparently healthy, live Ostriches and Emus shall be presented for slaughter and processing.

A2.2 Ante Mortem Inspection Aims

The specific aims of ante-mortem inspection are to:

- a) prevent the processing of Ostrich and Emus showing evidence of disease or any other condition that would make the carcass or parts unfit for human consumption;
- b) segregate Ostriches and Emus suspected of having a disease or any other condition that could make the carcass or part of it unfit for human consumption from other Ostriches and Emus cleared for slaughter;
- c) prevent Emus and Ostriches that are grossly contaminated with extraneous matter from entering the processing area;
- d) ensure all Ostriches and Emus, and in particular those that are injured or unwell, are treated humanely;
- e) detect the presence of exotic or other notifiable diseases.

A2.3 **Principles**

A2.3.1 Refer OEPS 5 Section 2: Pre-Slaughter.

It is expected that Ostriches and Emus will be slaughtered within 24 hours of passing ante-mortem inspection or, if not slaughtered within that period, re-inspected if they cannot get back to repeat within 24 hours.

A2.3.2 Disposition at ante-mortem inspection

One of the following dispositions shall be applied to each Ostrich or Emu after ante-mortem inspection:

- a) passed as fit for human consumption; or
- b) withheld from slaughter pending treatment for, or recovery from, an abnormal condition, provided the condition would allow all or part of the carcass to be passed as fit for human consumption and processing would not jeopardise the hygienic production of meat; or
- c) processed under restrictions the prevent unacceptable contamination of the processing floor and that permit more detailed post-mortem inspection; or
- d) rejected as unfit for processing, and destroyed (euthanased) by approved humane means and then disposed of in an approved manner.

Ostriches or Emus that are known to have been treated with, or exposed to, a drug (licensed animal remedy), chemical or biological substance shall not be slaughtered unless any withholding period recommended on the product label has elapsed.

A.3 Post -Mortem Inspection of Ostrich and Emus

- A3.A Following is the post -mortem inspection procedures derived from the *Australian* Standard For Hygienic Production Of Emu Meat For Human Consumption (September 1997).
- A3.B This specification shall be applied for both Ostrich and Emus slaughtered for human consumption. Refer to Manual 16 for the general procedures for post-mortem inspection.
- A3.C This specification is provided without prejudice to either changes in legislation; regulatory and/or industry development; an improvement knowledge of inspection procedures for Ostriches and/or Emus; and improvements/recognition of the animal health status of Ostriches and Emus.
- A3.D Some export markets may have different requirements for post -mortem inspection of Ostriches and Emus.

A3.1 Outcome

Only wholesome Ostrich and Emu meat is passed as fit for human consumption.

A3.2 Inspection Procedures for Ostriches and Emus

This standard previously contained Post mortem inspection guidance. This has been supplanted by Manual 16.

A3.3 Post-Mortem Observations and Dispositions

Given by Appendix A3 -2 follows.

Inspection Procedure for Ostriches and Emus

Head Inspection

Visual inspection of all head surfaces.

Option: Heads may be discarded before inspection (under review).

Viscera Inspection

Trachea and oesophagus visual examination
Proventriculus and gizzard visual examination
Intestines visual examination
Abdominal and thoracic air sacs visual examination

Heart visual examination and palpation
Liver visual examination and palpation
Spleen visual examination and palpation
Lungs visual examination and palpation

Kidneys visual examination in the carcass followed by

visual examination and palpation on a table.

Carcass Inspection

All external and internal surfaces visual examination.

Additional Requirements

Palpation of suspect lesions and, where necessary, incision to detect disease conditions and/or pathological changes.

Notes

- There are no lymph nodes in Emus.
 - As a precaution face masks should be worn when inspecting Emus.

Appendix 3-2

Post- Mortem Observations and Dispositions

Primary Observation	Secondary Observation	Tertiary Observation	Possible Disease or Condition	Disposition	Non- Conformance*
Abscess	Soft pus	Only local	Infection	Trim affected parts without spillage and condemn trimmings.	Critical
		involvement		Pass remainder for human consumption.	
	Soft pus	Systemic involvement, fever	Infection	Condemn as unfit for human consumption or animal food critical.	Critical
Abscess (Multiple)	Soft pus	Minimal systemic reaction	Infection	Condemn as unfit for human consumption or animal food.	Critical
Odour M	Mild	No systemic change	Metabolic, Plant	Hold under refrigeration to determine if odour diminishes human consumption or animal food. If dissipated pass for animal food. May be passed for animal food if odour remains.	Major
	Mild	No systemic change	Chemical	If possibly harmful when consumed condemn as unfit for human consumption or animal food. Maybe passed for animal food if odour remains.	Critical
	Strong	No systemic change	Metabolic, Plant, Chemical	If possibly harmful when consumed condemn as unfit for human consumption or animal food. Otherwise hold under refrigeration to determine if odour diminishes. If dissipated pass for human consumption or animal food. May be passed for animal food if odour remains.	Critical
Air Sacculitis I	Localised		Infection	Condemn affected tissues. Pass remainder for human consumption.	Minor
	Generalised involvement of sir sac	Systemic	Infection	Condemn as unfit for human consumption or animal food.	Critical
Anaemia Slig Pror	Slight change	Systemic involvement	Gastro-intestinal parasites. Blood parasites Metabolic disease	Pass for human consumption minor.	Minor
	Pronounced change	No systemic involvement	Gastro-intestinal parasites. Blood parasites Metabolic disease	Save for animal food or for pharmaceutical purposes.	Major
Arthritis	Single joint	No systemic involvement	Trauma/infection	Condemn limb. Pass remainder fit for human consumption.	Minor
	Multiple joints	No systemic involvement	Infection	Condemn limb. Pass remainder fit for human consumption.	Major
	Multiple joints	Systemic involvement	Infection	Condemn carcass as unfit for human consumption or animal food.	Critical

Aspergillosis	Localised	Systemic	Infection	Condemn affected tissues. Pass remainder fit for human consumption.	Minor
	Generalised involvement of air sac		Infection	Condemn carcass as unfit for human consumption or animal food.	Critical
Bruising	Surface only		Trauma	Trim lesion and immediately surrounding tissue. Trimmings may be used for animal food. Pass remainder fit for human consumption.	Minor
	Deep	Extensive	Trauma	Trim lesion and immediately surrounding tissue. Pass remainder fit for human consumption.	Major
Developmental Abnormalities	No systemic involvement		Old trauma Congenital deformity	Trim lesion and immediately surrounding tissue. Trimmings may be used for animal food. Pass remainder fit for human consumption.	
Ecchymosis	No systemic involvement		Improper stunning	Check stunning procedure. Trim lesion and immediately surrounding tissue. Trimmings may be used for animal food. Pass remainder fit for human consumption.	Minor
Egg Peritonitis	No systemic involvement		Infection	Condemn affected organs and tissues.	Minor
	Systemic involvement		Infection	Condemn as unfit for human consumption or animal food.	Critical
Emaciation	Systemic involvement		Nutritional stress	Save as animal food or for human pharmaceutical purposes.	Minor
	Systemic changes		Bacteraemia	Condemn as unfit for human consumption or animal food.	Critical
Enteritis	No systemic involvement			Condemn gastro-intestinal tract.	Minor
	Systemic involvement			Condemn as unfit for human consumption or animal food.	Critical
Erysipelas	Systemic involvement		Stress induced infection	Condemn as unfit for human consumption or animal food.	Critical
Gout	Pronounced		Metabolic disease	Condemn as unfit for human consumption or animal food.	Critical
Granuloma	No systemic involvement		Tuberculosis	Condemn affected parts. Pass remainder for human consumption.	Critical
	Systemic involvement including loss of condition		Tuberculosis	Condemn as unfit for human consumption or animal food.	Critical
Incomplete Bleeding	No systemic change		Poor technique Emergency slaughter	Check bleeding procedure. Save as animal food or for pharmaceutical	Minor
Jaundice	Slight		Metabolic disease Blood parasites	purposes. Hold under refrigeration for re-examination. If improved pass for human consumption.	Minor
	Pronounced	No systemic involvement	Metabolic disease Blood parasites	Hold under refrigeration for re-examination. If improved pass for human consumption. If insufficient change, save as animal food or for pharmaceutical purposes.	Major

	Systemic involvement	Kidneys affected		Condemn as unfit for human consumption or animal food.	Critical
Myopathy	Localised		Dietary	Trim affected area. Condemn trimmings. Pass remainder for human consumption.	Major
	Generalised		Dietary	Condemn as unfit for human consumption or animal food.	Critical
Myositis	Localised	No systemic involvement	Infection	Trim affected area. Condemn trimmings. Pass remainder for human consumption.	Major
	Generalised	No systemic involvement	Infection	Condemn as unfit for human consumption or animal food.	Critical
	Systemic involvement		Infection	Condemn as unfit for human consumption or animal food.	Critical
Neoplasm	Localised	No systemic involvement	Tumour	Pass remainder for human consumption.	
	Extensive	Systemic involvement	Tumour	Condemn as unfit for human consumption or animal food.	Critical
Oedema	Slight	No systemic change	Gastro-intestinal or blood parasites	Trim affected area. Condemn trimmings. Pass remainder for human consumption.	Minor
	Extensive, no systemic change	Loss of condition	Gastro-intestinal or blood parasites	Save as animal food or for pharmaceutical purposes.	Major
	Extensive systemic involvement	Loss of condition	Bacteraemia	Condemn as unfit for human consumption or animal food.	Critical
Pigmentation	No systemic change		Metabolic disease. Congenital Unknown	Hold under refrigeration for re- inspection. If colour dissipates pass for human consumption. If not save for animal food or for pharmaceutical purposes.	Minor
Uneviscerated Carcass			Delays in processing	Disposition will depend upon a range of factors including ambient temperature, length of delay. Action should be taken to minimise deterioration. Where the bacterial safety of the carcass is compromised condemn as unfit for human consumption.	Critical
White Spotted Livers	Localised		Infection.	Condemn liver. Pass remainder for human consumption.	Minor

^{* =} Failure to comply with disposition