



SAOBC 1001:2019

Ostrich Production - Requirements

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Foreword

The South African Ostrich Business Chamber (SAOBC) is the official representative body of the South African ostrich industry, representing all registered ostrich farms and all export approved ostrich abattoirs and tanneries. The focus of the SAOBC is to coordinate all South African commercial ostrich production in relation to export activities, ostrich health and welfare, control of movement and traceability.

This SAOBC Standard ('the Standard') contains requirements based on the SAOBC *Code of Conduct*. It has been developed to compile and update relevant documentation related to the ostrich farming industry that can be used as a basis for certification. The Standard is intended for any organization involved in the supply of ostrich derived products.

This SAOBC Standard has been developed in accordance with the SAOBC STD001 *Standards Development Procedure*. SAOBC STD001 reflects international expectations for standards development as identified in:

- World Trade Organization (WTO) Agreement on Technical Barriers to Trade, *Annex 3 Code of Good Practice for The Preparation, Adoption and Application of Standards*;
- ISO/IEC Guide 59:1994, *Code of good practice for standardisation*;
- ISO/IEC 17007:2009, *Conformity assessment - Guidance for drafting normative documents suitable for use for conformity assessment*; and
- ISEAL Code of Good Practice *Setting Social and Environmental Standards*, Version 6.0, December 2014.

This Standard was developed by the SAOBC *Standards Committee on the commercial production of ostriches* ('the Committee'). The Committee represents a balanced set of stakeholder interests with no one interest predominating. The members of the Committee come from the following interest groups:

- ostrich farmers;
- purchasers of ostrich derived products;
- ostrich scientists, researchers and technical experts;
- animal welfare and environmental management experts;
- standards writing and conformity assessment experts;
- regulators; and
- non-governmental organizations.

Due to the collective approach to standards development, individual requirements may not necessarily reflect the official opinion of an individual committee member, or the public policies or positions of the organizations that they are associated with.

This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Introduction

This Standard contains requirements for the commercial production of ostriches (including hatchery, farming, transport and abattoir processes). The Standard can be fulfilled by any organization undertaking commercial ostrich production regardless of size, geographical location or complexity of its activities.

Organizations involved in ostrich production can be certified as fulfilling the requirements of this Standard in accordance with the SAOBC Certification Scheme Rules. Certification enables suppliers of ostrich derived products to provide confidence to the market, regulators, consumers and other interested parties; that ostriches produced in accordance with this Standard take into account animal welfare, the environment and legal requirements.

This Standard includes outcome-based requirements that are based on current scientific knowledge and suitable husbandry practices that have been developed over many years. This Standard also includes the principle of continuous improvement. It recognizes that techniques used to assess animal welfare are constantly developing and being improved. Future editions of the Standard will take into account new research and experience. Organizations are encouraged to adopt improved practices, wherever possible, to enhance animal welfare and environmental outcomes.

The requirements in this Standard provide ostrich production organizations with flexibility on how they may choose to demonstrate conformity with this Standard. This Standard can be used in conjunction with more specific requirements that are prescribed by regulators or supply chains. To fulfil this Standard, organizations involved in ostrich production must demonstrate their fulfilment of *compliance requirements* (see 3.7).

In accordance with the ISO/IEC Directives, Part 2, this document uses the following verbal forms of expression:

- “shall” indicates a requirement;
- “should” indicates a recommendation;
- “may” indicates a permission;
- “can” indicates a possibility or a capability.

For organizations and auditors the SAOBC has further guidance on how requirements may be demonstrated.

1 Scope

This document provides requirements for the commercial production of ostriches (including breeding and egg collection; hatching; rearing and finishing; and processing) for the purpose of supply and trade in ostrich derived products.

2 Normative references

The following documents are referred to in the text in such a way that some or all of its content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- VPN/04, *Standard for the requirements, registration, maintenance of registration and official control of ostrich compartments in South Africa*, Department of Agriculture, Forestry and Fisheries, National Directorate Animal Health (VPN)
- EUROPEAN COUNCIL REGULATION (EC) No 1099/2009 of 24 September 2009 on the *protection of animals at the time of killing*, Chapters 2 and 3.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

	Term	Definition
3.1	Branding	Producing a mark on the skin for the purpose of identifying ostriches by the application of a hot (including electric) iron, freezing or acid.
3.2	Breeder ostrich	An adult ostrich older than 18 months, used for or intended to be used for ostrich egg production. SOURCE (MODIFIED) VPN/04 Standard for the requirements, registration, maintenance of registration and official control of ostrich compartments in South Africa, Department of Agriculture, Forestry and Fisheries, National Directorate Animal Health.
3.3	Bleeding	Severance of two carotid arteries or the vessels from which they arise. SOURCE EUROPEAN COUNCIL REGULATION (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing.

3.4	Breeding farm	A farm or portion of a farm, registered as an ostrich compartment in terms of VPN 4, that is used for the sole purpose of stocking breeder ostriches and where these breeder ostriches never come into contact, either directly or indirectly, with commercial slaughter ostriches of any age. SOURCE VPN/04 Standard for the requirements, registration, maintenance of registration and official control of ostrich compartments in South Africa, Department of Agriculture, Forestry and Fisheries, National Directorate Animal Health
3.5	CCTV	Closed circuit television.
3.6	Chick	Ostrich up to 3 months of age.
3.7	Compliance requirements	Any local, regional, national and international: a) statutory or regulatory requirements (including any necessary certificates, permits, licences, permissions, consents) for example Veterinary Procedural Notices (VPNs); b) requirements in treaties or conventions; and c) contractual requirements.
3.8	DAFF	South African Department of Agriculture, Forestry and Fisheries
3.9	Day-old chick	Ostrich chick less than 72 hours old. SOURCE VPN/04 Standard for the requirements, registration, maintenance of registration and official control of ostrich compartments in South Africa, Department of Agriculture, Forestry and Fisheries, National Directorate Animal Health.
3.10	Death	The irreversible loss of brain activity demonstrable by the loss of brain stem reflexes. SOURCE OIE Terrestrial Animal Health Code
3.11	Documented information	Information required to be controlled and maintained by an organization and the medium on which it is contained. SOURCE ISO 9000:2015, 3.8.6
3.12	Euthanasia	Killing an animal to prevent or alleviate pain or suffering.
3.13	Feather gathering	Manual removal of ripe feathers from live ostriches that does not result in pain or tissue damage.
3.14	Feather plucking	Removal of unripe feathers from live ostriches that could result in pain or tissue damage.
3.15	ISO	International Organization for Standardization.
3.16	Journey	The time from leaving the place of loading to arrival at the place of unloading.
3.17	Killing	Any intentionally induced process which causes the death of an animal. SOURCE EUROPEAN COUNCIL REGULATION (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing.

3.18	Lairaging	<p>Keeping animals in stalls, pens, covered areas or fields associated with or part of slaughterhouse operations.</p> <p>SOURCE EUROPEAN COUNCIL REGULATION (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing.</p>
3.19	Management system	<p>Set of interrelated or interacting elements of an organization to establish policies and objectives, and processes to achieve those objectives.</p> <p>SOURCE ISO 9000:2015, 3.5.3</p>
3.20	Nonconformity	<p>Non-fulfilment of a requirement.</p> <p>SOURCE ISO 9000:2015, 3.6.9</p>
3.21	OIE	<p>World Organisation for Animal Health (Office International des Epizooties)</p>
3.22	Organization	<p>A person, cooperative, association or company that undertakes ostrich production or processing activities. This can include a hatchery, farm or abattoir.</p>
3.24	Ostrich derived products	<p>The eggs, feathers, meat and skin of an ostrich.</p>
3.25	Production process	<p>Activities associated with the production of ostriches, including:</p> <ul style="list-style-type: none"> a) breeding and egg collection; b) incubation and hatching; c) rearing and finishing; <p>NOTE Including all daily activities associated with ostrich feeding, inspection, health and handling; feather gathering; and transportation.</p> <ul style="list-style-type: none"> d) processing.
3.26	Restraint	<p>Any procedure designed to restrict an animal's movements, sparing any avoidable pain, fear or agitation.</p> <p>SOURCE EUROPEAN COUNCIL REGULATION (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing.</p>
3.27	SAOBC	<p>South African Ostrich Business Chamber.</p> <p>NOTE Industry body of the South African ostrich industry. Individuals within the SAOBC have been authorized by DAFF to complete certain official functions on behalf of Government.</p>
3.28	Slaughter	<p>Killing of animals intended for human consumption.</p> <p>SOURCE EUROPEAN COUNCIL REGULATION (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing.</p>
3.29	Stunning	<p>Any intentionally induced process which causes loss of consciousness and sensibility without pain, including any process resulting in instantaneous death.</p> <p>SOURCE EUROPEAN COUNCIL REGULATION (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing.</p>
3.30	Toenail treatment	<p>Process of clipping the toenails of ostriches.</p>

3.31	Unconsciousness	State of unawareness caused by temporary or permanent disruption of brain function. SOURCE OIE Terrestrial Animal Health Code
3.32	Veterinary Medicine	Any medication that is registered with either the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No 36 of 1947) or the Medicines and Related Substances Control Act, 1965 (Act No 101 of 1965), for use in animals. SOURCE VPN/04 Standard for the requirements, registration, maintenance of registration and official control of ostrich compartments in South Africa, Department of Agriculture, Forestry and Fisheries, National Directorate Animal Health
3.33	VPN	Veterinary Procedural Notice from the Department of Agriculture, Forestry and Fisheries, National Directorate Animal Health - Official DAFF instructions, mostly to elaborate on and explain practical implementation of legal requirements or to provide instruction on aspects required by importing countries. SOURCE VPN/04 Standard for the requirements, registration, maintenance of registration and official control of ostrich compartments in South Africa, Department of Agriculture, Forestry and Fisheries, National Directorate Animal Health
3.34	WTO	World Trade Organization

4 General requirements

4.1 Legal status

The organization shall be a legal entity, or a defined part of a legal entity, such that the legal entity can be held legally responsible for its production processes.

NOTE A governmental organization is deemed to be a legal entity on the basis of its government status.

4.2 Operational legality

- 4.2.1 The organization shall identify and understand the compliance requirements associated with its ostrich production activities for each of its sites.
- 4.2.2 The organization shall ensure that it, and all of its suppliers or service providers, fulfil compliance requirements that relate to ostrich production activities.
- 4.2.3 The organization shall ensure that when it supplies live ostriches that the receiving entity fulfils compliance requirements.

5 Management requirements

5.1 Management system

5.1.1 The organization shall establish, implement and maintain a management system that enables the consistent fulfilment of the requirements in this Standard.

NOTE The level of complexity of the system will depend on each organization's specific context and on the size and scope of its ostrich production processes.

5.1.2 The management system shall include at least the following:

- a) identification, monitoring and control of processes used to carry out ostrich production;
- b) leadership, management commitment and allocation of responsibilities;
- c) resource management, including human resource management and competence;
- d) improvement, including internal audits, nonconformities, corrective actions and management review; and
- e) documented information that is necessary to demonstrate consistent fulfilment of the requirements in this Standard.

NOTE The extent of the documented information for a management system can differ between organizations based on the size of the organization and the scope and complexity of its ostrich farming activities.

5.2 Document control

5.2.1 When creating and updating documented information, abattoirs shall ensure appropriate:

- a) identification and description (e.g. a title, date, author, or reference number);
- b) format (e.g. language, software version, graphics) and media (e.g. paper, electronic); and
- c) review and approval for suitability and adequacy.

5.2.2 Documented information required by the management system and by this Standard shall be managed to ensure that:

- a) it is available and suitable for use; and
- b) it is adequately protected (e.g. from improper use, loss of confidentiality or loss of integrity).

5.2.3 For the control of documented information, the organization shall address:

- a) distribution, access, retrieval and use;
- b) storage and preservation;
- c) control of changes (e.g. version control); and
- d) retention and disposal.

NOTE Subclause 5.2 is applicable to abattoirs only. The abattoir may demonstrate conformity with this management system requirement by providing a valid third-party certificate from a certification scheme benchmarked and approved by the Global Food Safety Initiative (GFSI).

5.3 Performance evaluation and improvement

5.3.1 Performance evaluation

The organization shall analyse its performance to identify and evaluate:

- a) conformity with the requirements of this Standard;
- b) areas of risk;
- c) performance of personnel; and
- d) opportunities for improvement.

5.3.2 Internal audit

Abattoirs shall plan, establish and implement an internal audit programme that:

- a) ensures all parts of the management system (5.1) are audited on at least an annual basis;
- b) takes into account the importance of the processes concerned, any changes affecting the organization, the results of previous internal audits, management reviews and external evaluations;
- c) includes the frequency, methods, responsibilities, planning and reporting requirements for internal audits, including the audit criteria and scope for each internal audit;
- d) appoints internal auditors that conduct audits in a manner that ensures objectivity, consistency and impartiality;
- e) reports the results to relevant management;
- f) initiates any necessary corrective actions; and
- g) retains documented information as evidence of audit implementation.

NOTE 1 Guidance for auditing management systems can be found in ISO 19011, *Guidelines for auditing management systems*.

NOTE 2 Subclause 5.3.2 is applicable to abattoirs only. The abattoir may demonstrate conformity with this management system requirement by providing a valid third-party certificate from a certification scheme benchmarked and approved by the Global Food Safety Initiative (GFSI).

5.3.3 Nonconformities and corrective actions

5.3.3.1 When a nonconformity has been identified, the abattoir shall:

- a) determine the cause of the nonconformity and ways to prevent its recurrence;
- b) undertake corrective actions without delay and review their effectiveness; and
- c) make any necessary changes to the management system.

NOTE Nonconformities can be identified through various activities, including internal audits, external evaluations, management reviews and in response to feedback and complaints.

5.3.3.2 Corrective actions shall be appropriate considering the effects of the nonconformities encountered.

5.3.3.3 The organization shall retain documented information as evidence of:

- a) the nature of the nonconformity;
- b) the corrective action taken; and
- c) the results of any corrective action.

NOTE Subclause 5.3.3 is applicable to abattoirs only. The abattoir may demonstrate conformity with this management system requirement by providing a valid third-party certificate from a certification scheme benchmarked and approved by the Global Food Safety Initiative (GFSI).

5.3.4 Management review

5.3.4.1 Management shall review the abattoir's management system at least annually.

5.3.4.2 The review shall include the following:

- a) the status of actions from previous management reviews;
- b) changes in internal and external issues that are relevant to the management system;
- c) results of internal and external audits;
- d) nonconformities and corrective actions; and
- e) identification of opportunities for continual improvement.

5.3.4.3 The output from the management review shall include:

- a) identification of risks;

- b) opportunities for improvement; and
- c) the need for any changes to the management system.

NOTE Subclause 5.3.4 is applicable to abattoirs only. The abattoir may demonstrate conformity with this management system requirement by providing a valid third-party certificate from a certification scheme benchmarked and approved by the Global Food Safety Initiative (GFSI).

6 Resource requirements

6.1 Human resource management and competencies

6.1.1 The organization shall:

- a) identify and have access to a sufficient number of personnel to enable the fulfilment of the requirements of this Standard;
- b) allocate and communicate to personnel their responsibilities; and
- c) demonstrate that personnel involved in ostrich production activities have the competencies contained in Annex A.

NOTE Personnel includes those persons employed by or internal to the organization, and also any external persons contracted or used to undertake ostrich production.

6.1.2 The organization shall fulfil compliance requirements associated with labour and employment.

6.1.3 The organization shall provide training to personnel that:

- a) is appropriate to their assigned responsibilities; and
- b) includes personal health and safety.

6.2 Physical resources

6.2.1 The organization shall ensure infrastructure and equipment:

- a) does not cause harm to ostriches;

NOTE For example, using double fences to prevent male breeder ostriches in adjacent paddocks from fighting through fences and injuring themselves. Harm may include psychological aspects, for example fear as a consequence of poor race design, inadequate flooring or poor lighting.

- b) allows for effective ostrich handling; and
- c) is in working order.

- 6.2.2 If defective infrastructure and equipment could cause harm to ostriches, the organization shall:
- a) ensure ostriches be protected from harm until the defect is remedied; or
 - b) ensure the infrastructure and equipment is not used.
- 6.2.3 A functional CCTV system should be installed and operational to clearly monitor the following processes at an abattoir:
- a) unloading from vehicles into the lairage;
 - b) lairaging, including the movement of ostrich out of the lairage towards the stun point;
 - c) stunning, including ostriches approaching the stun area;
 - d) hoisting; and
 - e) bleeding.
- 6.2.4 The recorded CCTV footage should be:
- a) retained by the abattoir for a period of at least three months; and
 - b) be available for viewing on site by those assessing to this Standard.

7 Hatchery processes

- 7.1 The organization shall ensure hatchery processes fulfil compliance requirements.
- 7.2 The organization shall:
- a) determine and apply optimal incubation conditions;
- NOTE Industry practice often uses an incubator temperature of 36°C with a controlled variability of not more than 0.5°C.
- b) use incubators that supply sufficient oxygen and remove sufficient water to satisfy the biological needs of the embryos;
 - c) turn eggs regularly to ensure normal development of the embryos; and
 - d) remove infertile, dead or rotten eggs, when identified during incubation, to prevent contamination of the other eggs.
- 7.3 The organization shall:
- a) inspect incubated eggs for hatching progress when hatching is imminent; and
 - b) take immediate action to correct problems that are identified.

7.4 The organization shall not undertake forced hatching of chicks.

NOTE Assisted hatching is permitted. Assisted hatching involves careful cracking of the shell to replicate the assistance to hatching that is sometimes provided by the female ostrich in nature.

7.5 The organization shall ensure chicks are dry before being removed from the hatcher.

7.6 The organization shall ensure non-viable chicks (including unhatched chicks) are euthanized immediately in accordance with the methods described in Annex B.

7.7 The organization shall ensure vent sexing is only performed on day-old chicks.

7.8 The organization shall ensure toenail treatment is not performed on ostriches of any age after 31 December 2022.

7.9 The organization shall ensure that when toenail treatment is performed, prior to 31 December 2022, the process:

- a) avoids unnecessary pain or distress to the ostrich; and
- b) is undertaken using a suitable long-acting pain-relieving drug, such as a non-steroidal anti-inflammatory drug.

8 Holding facilities on-farm

8.1 The organization shall determine the minimum space allowance for each ostrich taking into account:

- a) age and size of the ostrich;
- b) flock size;
- c) flock health;
- d) environmental conditions; and
- e) type of production system.

NOTE Production systems may include holding facilities on-farm that comprise of quarantine camps, paddocks, housing and shelters. The need for housing and shelter will be determined by climate, geographical location, production practices and age of the ostriches.

8.2 The organization shall design and manage ostrich holding facilities that:

- a) are of sufficient size based on the minimum space allowances (8.1);
- b) allow access to food and water;

- c) allow access for personnel to undertake daily activities in a safe manner without undue disturbance to ostriches;
- d) are conducive to thermoregulation;

NOTE Thermoregulation can be influenced by environmental conditions, such as temperature, humidity and air quality. Environmental conditions can be managed by provision of water for hydration, shade, ventilation or climate control.

- e) provide ostriches with sufficient ventilation that ensures an adequate supply of oxygen and prevents the build-up of ammonia and humidity;
- f) allow for the effective control of disease;
- g) allow for behavioural needs;

NOTE Examples of behavioural needs are foraging and roaming.

- h) prevent escape; and
- i) prevent the entry of predators.

- 8.3 The organization shall check and manage ostriches throughout the growing period to ensure that minimum space allowances are achieved.
- 8.4 The organization shall not keep ostriches in solitary confinement, without visual contact with other ostriches.
- 8.5 The organization shall provide ostriches with light for a period and at an intensity that allows normal behaviour.

9 Husbandry

9.1 Feed and water

9.1.1 The organization shall ensure ostriches have access to a quantity and quality of feed that:

- a) meets their nutritional requirements for health and well-being;
- b) is appropriate for the ostrich's age, condition and stage of production;
- c) is not harmful; and

NOTE Harmful feed could include poisonous vegetation in paddocks or feed that has been inappropriately stored, has become spoiled or is in a poor physical state.

- d) does not contain growth stimulants.

NOTE Feed constituents can be demonstrated by, for example, a declaration from the feed mill or results of residue testing.

9.1.2 The organization shall ensure ostriches have access to a quantity of clean drinking water that satisfies their daily requirements.

9.1.3 The organization shall ensure that the quality of water supplied to ostriches meets compliance requirements.

9.2 Health

9.2.1 The organization shall ensure disease control measures, including biosecurity arrangements and reporting, meet compliance requirements.

9.2.2 The organization shall identify probable disease and injury risks and have mitigation measures that have been developed with veterinary advice.

NOTE Risks can include abnormal behaviours, such as feather pecking.

9.2.3 The organization shall only use beak bits when directed by a veterinarian in response to feather pecking problem.

9.2.4 The organization shall:

- a) inspect ostriches to enable the early detection of disease, abnormal behaviour or conditions that may cause suffering; and
- b) determine the inspection frequency based on the specific production system and needs of the ostriches.

9.2.5 An organization shall ensure sick or injured ostriches:

- a) are correctly diagnosed;
- b) receive treatment upon diagnosis; and

NOTE Treatment includes giving consideration to pain relief.

- c) are euthanised, in accordance with section 9.4, when not responding positively to treatment, or are unlikely to recover.

9.2.6 The organization shall ensure that treatment, including the use of veterinary medicines, fulfils compliance requirements.

9.2.7 The organization shall ensure veterinary medicines are stored and used in accordance with:

- a) label instructions for use in ostriches; or
- b) as prescribed by a veterinarian.

9.2.8 Antibiotics shall only be administered under the advice of a veterinarian.

NOTE See OIE *Strategy on Antimicrobial Resistance and Prudent Use of Antimicrobials*.



9.2.9 The organization shall maintain records of all treatments administered to ostriches in accordance with compliance requirements.

9.3 Feather gathering

9.3.1 The organization shall not undertake feather plucking on live ostriches.

9.3.2 The organization shall:

- a) ensure methods for feather gathering fulfil compliance requirements; and
- b) are only undertaken by SAOBC approved personnel in order to ensure:
 - i. the ostrich has been individually assessed for the ripeness of the feathers; and
 - ii. removal of the feathers does not result in pain or tissue damage.

9.4 Euthanasia

9.4.1 The organization shall ensure methods for euthanasia and disposal of dead ostriches fulfil compliance requirements.

9.4.2 The organization shall ensure:

- a) that euthanasia of ostriches is in accordance with the methods described in Annex B; and
- b) ostriches are checked immediately after euthanasia to confirm death.

10 Handling

10.1 The organization shall ensure that during handling:

- a) the ostrich does not experience pain, suffering, agitation or injuries;
- b) low stress handling techniques are used;
- c) husbandry procedures are planned to prevent unnecessary handling;

NOTE Activities such as vaccination, dosing, feather gathering and weight classification can be performed at the same time to limit handling and subsequent stress to the ostrich.

- d) hooding is only used when needed, and for no longer than is necessary, with a handler in attendance throughout;
- e) chemical restraint is not used; and
- f) electric goads are not used.

- 10.2 In addition to the requirements in 10.1, the organization shall ensure that when handling day-old chicks it is done carefully, supporting the chick's body.

11 Transportation

- 11.1 The organization shall ensure that the transport of ostriches is in accordance with compliance requirements.

- 11.2 The organization responsible for arranging the transport shall:

- a) ensure that the duration of the journey is not more than 8 hours;
- b) plan the transport having consideration of:
 - i. the age, number and type of ostriches to be transported;
 - ii. the type of transport vehicle, the number of compartments to be used and space allowances;
 - iii. the duration of transportation (loading, unloading and journey);
 - iv. the expected climatic and environmental conditions;
 - v. the road conditions and any driver rest stops; and
 - vi. emergency events, such as accidents, breakdowns and acts of nature.
- c) identify, approve and maintain a list of transport operators; and

NOTE Transport operators can be owned or operated by the organization.

- d) inspect vehicles and loaded ostriches before departure.

- 11.3 The organization responsible for loading shall ensure the ostriches are fit for travel and are not sick, injured, weak, disabled or fatigued or blind in both eyes.

- 11.4 Ostriches that become weak, sick or injured during transportation shall:

- a) be protected from possible harm inflicted by other ostriches;
- b) be monitored for the remaining part of the journey; and
- c) be euthanised immediately, in accordance with section 9.4, if their welfare is severely compromised.

NOTE This also includes weak, sick and injured ostriches that are identified at arrival or during unloading at the abattoir.

- 11.5 The organization shall ensure transport documentation is maintained, including:
- a) the origin and ownership of ostriches;
 - b) place, date and time of departure;
 - c) intended place of destination;
 - d) place, date and time of arrival;
 - e) expected and actual duration of the journey; and
 - f) any mortalities, injuries or significant delays or incidents.
- 11.6 The organization shall ensure that the transportation of day-old chicks meets the requirements of section 11.1-11.5, and in addition, day-old chick transport containers are fit for purpose providing them with a space to sit down, without sitting on top of each other.

12 Processing

12.1 Lairage

- 12.1.1 The organization shall ensure that inspection, holding and handling of ostriches at the abattoir fulfils compliance requirements.
- 12.1.2 The organization shall unload and inspect ostriches immediately on arrival at the abattoir.
- 12.1.3 The organization shall not keep ostriches in solitary confinement, without visual contact with other ostriches.
- 12.1.4 When ostriches are held in the lairage, the organization shall provide ostriches with;
- a) a minimum space allowance of 1m²/ostrich;
 - b) clean drinking water; and
 - c) feed, when held longer than 24 hours.

12.2 Slaughter

- 12.2.1 The organization shall ensure that slaughter processes meet compliance requirements.
- 12.2.2 The organization shall ensure that the method used for restraining ostriches:
- a) does not result in pain, suffering, agitation, injuries or contusions;
 - b) allows for effective handling of the ostrich;
 - c) facilitates effective stunning without delay;

- d) facilitates shackling of both legs during, or immediately after, stunning; and
- e) ensures the safety of personnel.

12.2.3 The organization shall ensure that ostriches are stunned prior to bleeding:

- a) in accordance with the methods described in Annex B;
- b) using a method that results in immediate unconsciousness that lasts until the ostrich is dead.

12.2.4 When the stunning method itself does not kill the ostrich, the organization shall ensure stunning is followed without delay by a procedure that ensures death.

12.2.5 The organization shall ensure that stunning equipment is:

- a) clean, in good repair and effective working order;
- b) is used in accordance with manufacturer's recommendations; and
- c) tested and calibrated prior to use.

12.2.6 The organization shall:

- a) immediately use a back-up stunning method if any signs of consciousness are present between the application of the stunning method and death; and
- b) confirm brain death before performing any further dressing procedures on the ostrich.

13 Environmental management

13.1 The organization shall ensure that environmental management practices, including the utilization of natural veld, meets compliance requirements.

13.2 The organization shall plan the establishment of ostrich camps, taking into account the impact on the environment, in accordance with compliance requirements.

13.3 The organization shall monitor and manage the following:

- a) resource availability, access and efficient use (e.g. land, water, energy);
- b) discharges to land, water and air;
- c) waste treatment, recycling and disposal; and
- d) safe handling, management, storage and disposal of medicines and chemicals, fuels and oils and other hazardous materials (including needles), including spills.

13.4 The organization shall undertake good environmental practices and cultivate a culture of environmental awareness with regards to biodiversity and conservation.

14 Traceability

- 14.1 The organization shall ensure that ostrich identification, movement between farms, and between a farm and an abattoir, fulfils compliance requirements for traceability.
- 14.2 The organization shall establish and maintain an identification and traceability system that enables the following:
- a) ostrich movement to be traced;
 - b) ostrich products to be traced back to the organization and site of origin;
 - c) analysis of production and welfare performance; and
 - d) disease outbreaks to be monitored and effectively managed.
- 14.3 The organization shall ensure that identification devices that are attached to the ostrich's body:
- a) do not cause discomfort or impair movement; and
 - b) are checked regularly to ensure they have not resulted in physical injury to the ostrich.
- 14.4 The organization shall ensure that branding is not used.

15 Security and emergency preparedness

- 15.1 The organization shall maintain site security in accordance with compliance requirements and prevent unauthorised access to sites and information.
- 15.2 The organization shall maintain, rehearse and action emergency procedures in accordance with compliance requirements and notify relevant authorities and stakeholders (e.g. neighbours).

NOTE Emergencies include fire; injury to personnel; equipment and transport breakdowns or accidents; acts of nature; power or water supply failures; chemical spillage or uncontrolled releases of hazardous substances; escaped ostriches; environmental conditions (e.g. extreme heat or cold, flooding, high winds); and acts of unauthorised access, vandalism or terrorism (including bomb threats).

- 15.3 The organization shall ensure personnel have knowledge of the location and operation of emergency equipment and the application of any documented information.
- 15.4 The organization shall investigate all emergency incidents and undertake corrective actions to prevent their reoccurrence.

Annex A Personnel Competencies

(Normative)

- A.1 For each ostrich production activity identified below in Table 1, the organization shall ensure that its personnel can demonstrate the competencies that are indicated by a tick (✓). Table 1 should be read vertically by selecting an ostrich production activity first, and then reading down the column to identify the competencies required for that activity.
- A.2 Following contemporary practice, competencies are described by identifying the types of *knowledge* the personnel should possess, and the types of *skill* that they should be able to demonstrate to apply that knowledge effectively.

Table 1: Competencies related to ostrich welfare and traceability

	Ostrich production activities						
	Vent sexing ostrich chicks	Handling ostriches including capture, restraint and transport	Transport of ostriches - Driver competency	Inspection and treatment of ostriches	Feeding and care of ostriches	Stunning and killing of ostriches	Ostrich identification and traceability
Competency - Knowledge							
a) Impact of stress and injury on ostrich welfare	✓	✓	✓	✓	✓	✓	✓
b) Impact of stress and injury on product quality		✓	✓	✓	✓	✓	✓
c) Identification of ostriches or ostrich derived products							✓
d) Hazards of handling ostriches or ostrich derived products	✓	✓	✓	✓	✓	✓	✓
e) Feed and water requirements		✓	✓	✓	✓		
f) Relevant management system requirements, organizational procedures associated with tasks undertaken		✓	✓	✓	✓	✓	✓
g) Workplace procedures for receipt/ dispatch of ostriches and ostrich derived products		✓	✓				✓
h) Responding to emergency situations		✓	✓	✓	✓	✓	✓
i) Administering veterinary medicine				✓			
Competency - Skill							
j) Identification of sick and injured ostriches	✓	✓	✓	✓	✓	✓	✓

	Ostrich production activities						
	Vent sexing ostrich chicks	Handling ostriches including capture, restraint and transport	Transport of ostriches - Driver competency	Inspection and treatment of ostriches	Feeding and care of ostriches	Stunning and killing of ostriches	Ostrich identification and traceability
k) Identify out of specification ostriches or ostrich derived products		✓	✓	✓	✓	✓	✓
l) Complete ostrich or derived products identification and traceability records							✓
m) Identify signs and causes of stress in ostriches	✓	✓	✓	✓	✓	✓	✓
n) Comply with workplace procedures and requirements for handling ostriches and minimizing ostrich stress	✓	✓	✓	✓	✓	✓	✓
o) Operation and maintenance of capture and restraint equipment		✓	✓	✓		✓	✓
p) Operation and maintenance of stunning equipment						✓	
q) Operation and maintenance of killing equipment						✓	
r) Operation and maintenance of emergency equipment	✓	✓	✓	✓	✓	✓	✓
s) Administering veterinary medicine				✓			

NOTE Additional competencies for personnel approved by the SAOBC to undertake feather gathering are contained in the SAOBC Certification Scheme Rules.

Annex B Permitted slaughter and euthanasia methods

(Normative)

Table 2: Permitted slaughter and euthanasia methods

Method	Description	Conditions of use	Key parameters
a) Automatic electrical stunning (head-only)	Immediate loss of consciousness, induced by the application of electrodes to the head	For routine stunning in an abattoir With rotating box restraint Electrodes applied across the brain Followed within 60s of the start of the stun by effective bleeding	Minimum current of 400mA, 50Hz AC
b) Manual electrical stunning (head-only)	Immediate loss of consciousness, induced by the application of electrodes to the head	For routine stunning in an abattoir, euthanasia or back-up stunning With effective restraint Electrodes applied across the brain Followed within 60s of the start of the stun by effective bleeding	Minimum current of 400mA, 50Hz AC
c) Manual electrical stunning (head-only followed by cardiac arrest)	Immediate loss of consciousness followed by death, induced by the application of electrodes to the head followed without delay by application across the heart	For euthanasia With effective restraint Electrodes applied across the brain Head-application followed immediately by application of electrodes across the heart	Minimum current of 400mA (head application), 50Hz AC
d) Penetrative captive bolt pistol	Immediate loss of consciousness, induced by a percussive blow to the head and bolt penetration into the brain	For routine stunning in an abattoir, euthanasia or back-up stunning With effective restraint To be followed by a procedure that ensures death	Correct force (cartridge power) and positioning of the device to enable penetration of the brain by the bolt

Method	Description	Conditions of use	Key parameters
e) Bleeding	Produces death through loss of blood from the sticking wound	For routine slaughter in an abattoir and euthanasia Only after effective stunning Not suitable as a standalone method	Either by a complete ventral cut of the neck, just below the head, severing both carotid arteries; or by thoracic sticking to sever the major blood vessels, including those from which the carotid arteries arise.
f) Percussive blow to the head	Irreversible loss of consciousness, induced by a percussive blow to the head (manual or percussive device, such as a priest or non-penetrative captive bolt device)	For euthanasia Not for routine killing in an abattoir To be followed by a procedure that ensures death	Correct force and location of the manual blow
g) Lethal injection	Irreversible loss of consciousness followed by death, induced by the injection of veterinary medicines	For euthanasia Not for ostriches destined for human consumption Administered by a veterinarian	Administration route Approved medicine

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