

Department of Agriculture

National Directorate: Veterinary Services.

Notice No. VPN/13/2007-01

TO: STATE VETERINARY OFFICERS

SUBJECT: Standard for Ante-Mortem and Post-Mortem Meat Inspection and Hygiene Control at Ostrich Meat Establishments

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THIS VPN/13/2007-01 REPLACES VPN/13/2003-09


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Director: Veterinary Services

2008-04-09

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Date

PART I: INTRODUCTION

1. AN ORGANIZATIONAL AND SUPERVISORY STRUCTURE IS NEEDED AT THREE LEVELS TO ENSURE UNIFORM LAW ENFORCEMENT AND THE HIGHEST STANDARDS OF EXPORT CERTIFICATION

- 1.1 This first level of involvement is at the abattoir and cutting plant. An official State Veterinarian must inspect every animal before slaughter. In addition, it must be guaranteed that every carcass of animals slaughtered for the export market will be inspected under the supervision of an official state veterinarian. Only products obtained from animals that are found to be healthy may be exported to foreign countries. This forms part of active animal disease surveillance and is one of the ways in which a country can mitigate the risk of importing animal diseases with dire financial consequences, such as avian influenza and Newcastle disease. The results of the post-mortem health inspections must be recorded by the official veterinarian and, where diseases communicable to man are diagnosed, communicated to the competent veterinary authorities responsible for supervision of the area from which the animals originated, as well as to the person responsible for the said area.

In addition there must be hands-on continuous verification that requirements set both by the Meat Safety Act (2000) as well as those set by the importing countries are being complied with. In order to do certification of the product, the Hygiene Management System employed by the abattoir is also monitored and verified.

Depending on the size of the plant the above function can be very extensive especially if hygiene standards is not what it should be.

The scope of Hygiene Management System to be verified includes ante-mortem through to microbiological assays and in many cases the official State Veterinarian will require assistance. It is therefore recommended that one or more senior official meat inspectors (OMI) assist the official State veterinarian in high throughput abattoirs especially if cutting plants are associated. The National Competent Authority (NCA) together with the Provincial Competent Authority (PCA) will determine the number of official personnel employed. These official meat inspectors can also be utilized in monitoring the post-mortem inspections (or primary meat inspection) as done by meat inspectors.

- 1.2 The second level of official involvement is the supervision of the official State Veterinarian and his or her inspection team by a supervisor. This supervisory veterinary official must perform periodic (preferable monthly) checks/inspections to assess whether the quality of verification is up to standard and give written proof that inspections of establishments are carried out routinely so as to demonstrate that South African laws are enforced (also known as official internal audits).
- 1.3 The third level of official involvement is the National Department of Agriculture who must set standards and ensure that standards are applied uniformly in all the Provinces. This requires auditing teams. A team would comprise at least one State Veterinarian and a number of senior official meat inspectors depending on the size of the establishments being audited. Frequency of audits can be determined by performance.

PART II: OFFLOADING AND ANTE-MORTEM INSPECTION

2.1 OFFLOADING OF LIVE OSTRICHES AT THE ABATTOIR

It is the duty of the Official State Veterinarian to see to it that the following requirements are met:

2.1.1 Offloading of ostriches

Ostriches arriving at an abattoir must be offloaded immediately by trained personnel.

Birds must be offloaded in a calm manner to avoid excitement, fear, stress and injury.

Birds may not be picked up or dragged by the necks, wings or feathers during off loading.

2.1.2 Rest Periods

Ostriches must rest overnight in lairages before slaughtering, but if a registered inspector is satisfied that they are rested, they may be slaughtered on the day of arrival.

2.1.3 Lairaging

- (1) Ostriches awaiting slaughter must be held in lairages and pens.
- (2) Lairages must be cleaned after each batch of birds has been removed.
- (3) Clean drinking water must be available at all times for birds awaiting slaughter.
- (4) Ostriches may not be kept in a lairage or pen for longer than 48 hours.
- (5) Ostriches kept in lairages and pens for longer than 24 hours must be fed.
- (6) Where birds are fed in a pen, feed may only be placed in a feed trough.

2.1.4 Herding

All movement of ostriches in lairages, pens, passages and crushes must be done calmly and humanely, without hitting or shouting.

2.1.5 Emergency slaughter

- (1) Ostriches injured during transportation, off-loading or lairaging must be slaughtered without delay to prevent further suffering.
- (2) Ostriches which are injured and cannot walk must be stunned and bled in the lairage and transported to the emergency slaughter area.

2.1.6 Isolation

Ostriches suspected of suffering from a condition that may render the meat unsafe for human and animal consumption must be isolated in a separate area and a crush-pen must be provided for further examination by a registered inspector for approval prior to slaughter.

2.2 ANTE-MORTEM INSPECTION

- 2.2.1 (1) A registered inspector doing ante-mortem inspection at a –
- (a) rural abattoir, must be at least a meat inspector or, provided exemption has been granted by the provincial executive officer, a meat examiner;
 - (b) low throughput abattoir, must be at least a meat inspector; and
 - (c) high throughput abattoir must be at least a meat inspector.
- (2) A declaration of health and origin must be provided for all ostriches by the owner of the slaughter stock and recorded by the abattoir owner and such health declaration must contain the following information –
- (a) date of delivery;
 - (b) name and address of owner or farm;
 - (c) number of ostriches;
 - (d) health status of the herd(s) including mortality rate; and
 - (e) medication, if given as well as withdrawal periods and dates;
- (3) Ostriches suffering from, or suspected of suffering from, a controlled disease, under the Animal Diseases Act, 1984 (Act No.35 of 1984), may only be presented for slaughter or transported if accompanied with a permit issued by the state veterinarian in the area of origin (red cross permit).
- (4) An ostrich must be inspected on the day of arrival at the abattoir, and the inspection must be repeated on the day of slaughter if the slaughter is not done within 24 hours of arrival.
- (5) There must be a standard procedure at an abattoir to convey the information acquired in the lairages to the registered inspectors in the meat inspection area, and a method of marking specific birds for the attention of a registered inspector should be in place.

Further inspections and findings

- 2.2.2 (1) (a) All ostriches that, in the opinion of a registered inspector doing ante-mortem inspection as described in regulation 83, are not fit for slaughter must be inspected by a registered veterinarian;
- (b) The veterinarian must decide whether such birds may be slaughtered, provisionally slaughtered or disposed of;
- (c) If a veterinarian is not available, such birds may be returned to their owners, but if the abattoir is a quarantine abattoir the birds must be destroyed.
- (2) If the veterinarian decides that an ostrich mentioned in subregulation (1)(a) may be slaughtered or provisionally slaughtered, the carcass of such ostrich is subject to secondary meat inspection in terms of regulation 93.

- (3) All ostriches should be inspected for the presence of growth promoter implants. If suspected on anti-mortem, special attention should be given during the post-mortem examination, to verify. Refer to VPN/19 for the Standard relating to the national residue-monitoring programme.
- (3) An ostrich may not be slaughtered if it is suspected that a forbidden substance has –
 - (a) been administered to it;
 - (b) been implanted in it;
 - (c) contaminated it; or
 - (d) been eaten by it.

Handling of dead ostriches

- 2.2.3 (1) All “dead on arrival” and “dead in pen” birds must be disposed of as condemned material in terms of Part VIII.
- (2) No dead or dying ostrich may be brought into or removed from the abattoir premises without the prior approval of a registered inspector.
- (3) No carcass or part thereof that has been condemned may be brought into any part of the abattoir containing edible products.
- (4) It is the owner’s choice to have a post-mortem inspection done except where required by a registered inspector or where a controlled disease under the Animal Diseases Act, 1984 (Act No.35 of 1984), is suspected in which case a state veterinarian must be notified.
- (5) The place and method of flaying dead ostriches for the purpose of regaining skins must be done according to a protocol approved by the provincial executive officer.

Quarantine

- 2.2.4 (1) All ostriches suffering from a controlled disease contemplated in the Animal Diseases Act, 1984 (Act No.35 of 1984), must be moved to the abattoir under cover of a “red cross” permit issued by a state veterinarian at the farm and the arrival of the consignment at the abattoir must be confirmed to such state veterinarian.
- (2) If an ostrich is suffering from or is suspected of suffering from a controlled disease contemplated in the Animal Diseases Act, 1984 (Act No 35, of 1984), or if any ostrich has tested positive on the farm, and is not accompanied by a “red cross” permit, a state veterinarian of the Provincial Directorate: Veterinary Services, in whose area the abattoir is situated, must be notified immediately.
- (3) In the event of an abattoir being declared a prohibited or restricted area under the Animal Diseases Act, 1984 (Act No.35 of 1984), the provincial executive officer may instruct the owner to slaughter an ostrich under conditions laid down by that officer.
- (4) Vehicles that transported ostriches suffering from a controlled disease must be washed and disinfected as determined by a state veterinarian before leaving the abattoir premises.

PART III: POST-MORTEM INSPECTION

3. POST-MORTEM INSPECTION

- 3.1 It is the duty of the Official State Veterinarian to supervise the Post-mortem meat inspection of the meat inspection team of all carcasses as per Schedule 1 (attached).
- 3.2 The Official State Veterinarian must record the checks of the monitoring as well as the corrective action taken in cases of non-compliance. Frequency of check must be based on performance.
- 3.3 The Official State Veterinarian must inspect all suspect ostrich carcasses, and provide a final decision on the suitability / not of such suspected carcasses for approval for export of meat derived from these suspected carcasses.

For this purpose laboratory procedures may be required.

- 3.4 Records of above laboratory results must be recorded and correlated to tag numbers of relevant carcasses.
- 3.5 Records must be kept of all carcasses not fit for export providing reasons therefore.
- 3.6 Residue Monitoring

Refer to the VPN/19 for the standard relating to the National Residue –Monitoring programme.

In addition, the following must be adhered to:

- 3.6.1 Inspect each ostrich slaughtered for the possible presence of growth promoter implants. The inspection should concentrate on the top third of the neck and also the wing tip.

SCHEDULE 1

POST-MORTEM INSPECTION

POST-MORTEM MEAT INSPECTION – OSTRICH

General

1. All relevant information, including ante-mortem and health records, must be taken into consideration when doing meat inspection.
2. No carcass, part thereof, rough or red offal may be sold or dispatched from an abattoir unless it has been inspected and passed by a registered inspector except in the case of some rural abattoirs as deliberated in regulation 99.
3. A person may not remove, cut or debone any carcass or meat prior to inspection.
4. A person may not remove any sign or evidence of any disease, condition, contamination or soiling by washing, trimming or any other manner prior to meat inspection, unless it is done under the supervision of a registered inspector.
5. The registered inspector must inspect the carcass and viscera by observation, palpation and if necessary incision.
6. Heads, feet, rough and red offal must at all times be identifiable with the carcass of origin.
7. All relevant information, including ante-mortem and health records, must be taken into consideration when doing meat inspection.

Inspection of ostrich carcasses

8. (1) The registered inspector must inspect a carcass by means of observation, palpation, smell and, where necessary incision and must take into consideration –
 - (a) its state of nutrition;
 - (b) its colour;
 - (c) its odour;
 - (d) its symmetry;
 - (e) the efficiency of its bleeding;
 - (f) any contamination;
 - (g) its pathological conditions;
 - (h) any parasitic infestation;
 - (i) any injection marks;
 - (j) any bruising and injuries;
 - (k) any abnormalities of muscles, bones, tendons, joints or other tissues; and
 - (l) the age and sex of the bird from which it was derived.
- (2) Inspection of the ostrich carcass must be done by –
 - (a) inspection of the exterior as well as the interior of the airsacs by incising;
 - (b) incision of the lungs parallel to the main axes.
 - (c) visual inspection of the trachea and oesophagus.
 - (d) visual inspection of the pericardium and the heart, the latter being incised lengthwise so as to open the ventricles.
 - (e) visual inspection and palpation of the liver and an incision across the bile ducts of the liver.
 - (f) visual inspection of the gastro-intestinal tract.

- (g) visual inspection and, if necessary, incision of the spleen.
- (h) visual inspection and incision of the kidneys.
- (i) visual inspection of the peritoneum.
- (j) visual inspection of the genital organs.
- (k) visual inspection of the muscle surfaces and exposed joint surfaces.

Inspection of heads

9. The head must be examined by observation except if heads are removed before the inspection point and is not destined for human consumption, this inspection need not be done.

Inspection of feet and wing tips

10. The feet and wing tips must be examined by observation except if removed before the inspection point and is not destined for human consumption, this inspection need not be done.

Inspection of neck

11. The top third of the neck must be inspected for the possible presence of growth promoter implants, by means of observation, palpation and where necessary incision.

POST-MORTEM MEAT INSPECTION - SUSPECT OSTRICH CARCASSES

General

1. (1) Suspect carcasses found during primary meat inspections in terms of sub part B, must be marked “detained” and must be subjected to secondary meat inspection by a registered veterinarian.
- (2) During a secondary inspection information regarding the carcass must be ascertained on the –
 - (a) age and sex;
 - (b) organ or part of the carcass affected;
 - (c) condition or disease;
 - (d) probable cause of the condition or disease; and
 - (e) finding and the motivation therefore where applicable.
- (3) Depending on the said finding, the carcass, organ or meat may be –
 - (a) approved;
 - (b) conditionally approved, subject to treatment;
 - (c) partially approved by removing the condemned part; or
 - (d) totally condemned.
- (4) (a) In case of totally condemned, partially condemned, or conditionally passed carcasses, the owner may request a written condemnation certificate.
- (b) This certificate may only be issued by a registered veterinarian if there is no written agreement between the abattoir owner and the owner of the bird or carcass that the registered meat inspector may provide such a condemnation certificate.

Emergency slaughtered ostriches

2. (1) The meat of ostriches which were referred to a registered veterinarian during ante-mortem inspection, as contemplated in regulation 83, must be examined by the registered veterinarian who must pay particular attention to –
 - (a) carcass colour, blood content of intercostal veins and the small vessels beneath the serosa of the abdominal wall.
 - (b) loosen a leg to observe the exposed connective tissue and articular surface.
 - (c) the condition of the musculature and abnormal odours;
- (2) If regarded as necessary by the registered veterinarian, the carcass or meat must be submitted for laboratory examination in order to make a final decision.

Records

3. The results of the ante-mortem examination, primary meat inspection and secondary meat inspection must be recorded and where zoonotic and controlled diseases, contemplated in the Animal Health Act, 2002 (Act No.7 of 2002), are diagnosed the local state veterinarian must be notified on the day of slaughter.

PART IV: HYGIENE CONTROL

4. VERIFICATION OF A HYGIENE MANAGEMENT SYSTEM (HMS)

It is the function and responsibility of management to implement an approved Hygiene Management System. Furthermore, it is the responsibility of management to validate on a continuous basis the effectiveness of such a system.

It is however essential that such a Hygiene Management system must be based on the regulatory requirements set under the Meat Safety Act of 2000 (Act No. 40 of 2000) (at present still in draft form) or at least contain the same elements as addressed in the Hygiene Management System (HMS) as proposed in the above Regulations.

See schedule II relating to the National Standardised Hygiene Management System.

- 5.** It is the function of the Official State Veterinarian to verify that such a Hygiene Management System is indeed in place and that the Hygiene Control Programs (HCPs) (also known as Pre-Requisite Programs (PRPs) or Good Manufacturing Practices (GMPs) and associate monitoring systems reflect an accurate representation of the systems and procedures implemented at the establishment to assure the highest possible hygiene standard and safety of the ostrich meat produced for export.

The Official State Veterinarian may make use of his/her inspection team to verify the accuracy of the checks made in the above Hygiene Control Programs.

6. RECORDS OF VERIFICATION PROCEDURES MUST BE DOCUMENTED AND BE AVAILABLE FOR:

- a. Audits by Provincial Controlling Authority.
- b. Audits by National Controlling Authority.

7. MICROBIOLOGY

See standards for the microbiological monitoring of meat (VPN/15) and water (VPN/16).

Microbiological monitoring of sanitation, personal hygiene, etc. will be forwarded in future documents - basic principles remain the same.

The above standards apply to abattoir management. It is however the function of the Official State Veterinarian to verify the validity of the above microbiological results, by submitting parallel samples to nationally approved laboratories. Results of above must be documented and recorded.

SCHEDULE 2

HYGIENE MANAGEMENT SYSTEMS

1. SCHEMATIC DRAWING OF THE ABATTOIR

- 1.1 The second step in the design of a H.M.S. is to obtain updated schematic drawings of the abattoir.
- 1.2 Schematic drawings of the abattoir should include the following:
 - 1.2.1 All the different areas on each level.
 - 1.2.2 All the different rooms in each area indicating the process or operation that takes place in the room.
 - 1.2.3 The flow of the product.
 - 1.2.4 Ancillary structures on the premises.
 - 1.2.5 For rooms where temperature control is prescribed, the required temperature, as well as the capacity of the specific room, must be indicated.
 - 1.2.6 Ablution facilities for workers in clean and dirty areas as well as the personnel entrances and personnel flow routes to the different areas will have to be indicated on the plan.
 - 1.2.7 All entrances to rooms/areas/building.
 - 1.2.8 Any other information as required.
- 1.3 A site plan indicating all structures and buildings, as well as roadways, boundaries entrances/exits as well as any other relevant information is essential.
- 1.4 A1 or A0 full scale drawings can be used in the office (ops room), but smaller A4 or A3 size reduced scale drawings are more versatile and can also be filed/documentated more readily. Computerised systems should be available.
- 1.5 Different schematic drawings are used for different systems.
- 1.6 Examples are:
 - 1.6.1 Diagram indicating workstations and personnel flow, routes of entry and exit. Colour coding can indicate clean and dirty functions.
 - 1.6.2 Diagram indicating position of slaughter equipment, work stations, sterilisers, HWB's, boot washes etc.
 - 1.6.3 Diagram indicating position of reticulation system with identifiable checkpoints for water quality control. Water source, reservoirs holding tanks etc. must be indicated. Hot and cold water systems may be colour coded.
 - 1.6.4 Diagram of chillers, freezers, holding rooms, outloading areas etc. indicating required max. or min. temperatures (as well as points of monitoring) must be available for thermo control program.
 - 1.6.5 Diagram indicating bait stations for vermin control.
 - 1.6.6 Diagram indicating vapour control areas.
 - 1.6.7 Diagram indicating location sites of soap containers, disposable towels and toilet paper.

- 1.7 The above are but **some** of the uses these schematic drawings can be used for. No set system is prescribed. The HM may combine more than one diagram or even split, enlarge or condense different diagrams to suit the system applied.

2. FLOW DIAGRAM OF SLAUGHTER AND PROCESSING PROCESS

2.1 This diagram should include all steps involved in the process, from receiving of the slaughter animals to outloading and transportation of the end product. The diagram must include sufficient detail and technical data. Types of data could include: equipment layout and characteristics, sequence of all steps, technical parameters of operations, flow of products, segregation of clean and dirty areas, personnel routes and product storage procedures. Maintenance procedures must be incorporated in the maintenance management program.

2.2 This diagram can also be fragmented to categories for specific areas/functions.

3. HAZARDS

3.1 The HM must compile a list of all potential biological, chemical or physical hazards that may occur at each step of the process.

3.2 Hazards may include the unacceptable contamination of carcasses or meat by:

3.2.1 Biological hazards:

- (i) Pests e.g. Blow fly larvae
- (ii) Spoilage organisms e.g. micro-organisms, yeasts and moulds
- (iii) Pathogenic micro-organisms
- (iv) Toxins and/ or other undesirable products of microbial metabolism

3.2.2 Chemical hazards:

- (i) Including antibiotics or other pharmacological residues, pesticides, sanitizers etc.

3.2.3 Physical hazards

- (i) Including glass, pieces of metal, soil/ dirt, hair etc.

3.3 Modern Hygiene Management systems include ineffective chilling and breaks in the cold chain as critical hazards to meat and edible products.

4. HYGIENE MANAGEMENT PROGRAMMES

4.1 The owner of an abattoir must –

- (a) provide the provincial executive officer with a documented Hygiene Management System (HMS) containing detailed information on control measures or programs required to monitor identified control points, including the methods of monitoring or checking these control points, for approval;
- (b) provide relevant records of observations, checks, measurements or results;
- (c) provide sampling programs for laboratory analyses, as well as names of laboratories to do the required analyses;

- (d) provide written accounts of decisions relating to corrective actions when taken; and
- (e) assess the hygiene status of the abattoir by means of the Hygiene Assessment System (HAS) and provide results to the provincial executive officer for verification as frequently as he or she may require.

Document management system

4.2 A document management system must provide for –

- (a) the retrieval of documents relating to an identified slaughter batch;
- (b) the recording of each slaughter batch containing information regarding date of slaughter, species slaughtered, mass, quantities, identification and destination for carcasses as well as cut meat; and
- (c) a documented product recall procedure approved by the provincial executive officer.

Schematic plan of abattoir

4.3 The owner must prepare an updated schematic plan of the abattoir which must include the details of –

- (a) all the different areas on each level;
- (b) all the different rooms in each area identified, indicating the process or operation including the capacities or rates of operation that take place in such rooms;
- (c) the flow of the product;
- (d) ancillary structures on the premises;
- (e) the required temperature as well as the capacity of each room where temperature is controlled;
- (f) the different ablution facilities for workers in clean and dirty areas as well as the personnel entrances to the different areas;
- (g) all entrances to rooms, areas and building; and
- (h) boundaries, indicating entrances and exits to and from premises.

Flow diagram of slaughter process

4.4 The owner must prepare a flow diagram of the slaughter process which must include –

- (a) all steps involved in the process, including delays during or between steps, from receiving of the ostriches to placing of the end product on the market; and
- (b) details and technical data including equipment layout and characteristics, sequence of all steps, technical parameters of operations, flow of products, segregation of clean and dirty areas, hygienic environment of the abattoir, personnel routes and hygienic practices, product storage and distribution procedures.

Potential hazards

- 4.5 The owner must prepare a list of all potential biological, chemical or physical hazards that may occur at each step of the process, including –
- (a) unacceptable contamination or recontamination of a biological, chemical or physical nature;
 - (b) unacceptable survival or multiplication of pathogenic micro-organisms; and
 - (c) unacceptable production or persistence of toxins or other undesirable products of microbial metabolism.

Prevention of hazards

- 4.6 The owner must prepare written hygiene control programs (HCP) for approval by the provincial executive officer, to prevent, eliminate or reduce hazards mentioned in regulation 57 to acceptable levels and must –
- (a) ensure that control programs for each hazard is implemented;
 - (b) establish critical limits for control points;
 - (c) establish a monitoring or checking system for each control point; and
 - (d) prepare written corrective actions that must be taken without hesitation when a deviation is observed and such corrective action must specify –
 - (i) the persons responsible to implement the corrective action;
 - (ii) the means and action required for each hazard;
 - (iii) the action to be taken with regard to the meat having been processed during the period when the process was out of control; and
 - (iv) that written record of measures taken must be kept.

Hygiene control programs (HCP)

- 4.7 The owner of an abattoir must implement –
- (a) a HCP for ante-mortem inspection, including control measures to –
 - (i) ensure that all ostriches which for some reason or other cannot be processed into safe meat are identified and handled in accordance with Part VIII;
 - (ii) identify birds with diseases and conditions of which symptoms may not be visible during post-mortem meat inspections;
 - (iii) identify birds with zoonotic diseases;
 - (iv) identify birds with highly contagious diseases or diseases controlled under the Animal Health Act, 2002 (Act No.7 of 2002);
 - (v) identify birds that pose a high contamination risk, and such as those with septic conditions or birds that are excessively soiled; and

- (vi) ensure that injured ostriches in obvious pain are presented for emergency slaughter;
- (b) a HCP for slaughter and dressing, including –
- (i) control measures (CM) to ensure that no contamination of meat and edible products occur from –
 - (aa) the external surface of the ostrich slaughtered;
 - (bb) wind and dust;
 - (cc) the contents of hollow organs;
 - (dd) persons working with edible products; or
 - (ee) contact with unclean objects;
 - (ii) slaughter and dressing procedures which must limit any contamination to the absolute minimum;
 - (iii) training of all workers in correct slaughter techniques including principles of hygiene practices which must be monitored;
 - (iv) a programme for the daily checking of carcasses for soiling to provide for regular checking of a representative sample of carcasses throughout the day on a random basis and to determine the levels of contamination of carcasses;
- (c) a HCP for meat inspection, in terms of which the supervisory registered meat inspector (SMI) assisted by the registered veterinarian must monitor meat inspection by means of implementation of written control measures to ensure –
- (i) that meat inspection is done according to Part VI;
 - (ii) the competency of the meat inspectors and meat examiners;
 - (iii) the personal hygiene of the meat inspectors and meat examiners;
 - (iv) that heads, red and rough offal are correlated to the carcasses of origin;
 - (v) the security of detained carcasses and organs;
 - (vi) the security of provisionally passed carcasses and organs;
 - (vii) the security of the stamp of approval;
 - (viii) the security of condemned material;
 - (ix) the implementation of standard operational procedures (SOP's) for –
 - (aa) emergency slaughter;
 - (bb) preferential slaughter;
 - (cc) provisional slaughter;
 - (dd) slaughter of ostriches which have reacted positively to tests done on the farm;

- (ee) dirty birds; and
 - (ff) dropped meat;
- (d) a HCP for personal hygiene of workers in terms of which –
- (i) a general code of conduct , approved by a registered inspector, for personnel and in particular for workers who come into direct contact with meat and edible products, must be available;
 - (ii) a training program, as well as registers of attendance, for all personnel to apply the principles of the code of conduct referred to in subparagraph (i) must be available; and
 - (iii) records of surveillance and supervision including records of disciplinary action in cases of repetitive misconduct or non-compliance must be available;
- (e) a HCP for medical fitness of workers in terms of which –
- (i) records of initial medical certification that workers are fit to work with meat and edible products, prior to employment, must be available; and
 - (ii) records of daily fitness checks, including corrective actions applied in cases of illness and injury, must be available;
- (f) a HCP for sterilizer temperatures and maintenance of sterilizers in terms of which control measures to ensure the continuous availability and accessibility of sterilizers in good working order at temperatures of 82 °C, including registers for daily checks indicating frequency of checks as well as corrective action procedures in cases of non-compliance, must be available;
- (g) a HCP for the availability of liquid soap and soap dispensers, toilet paper, and disposable towels, in terms of which control measures to ensure the continuous availability and accessibility of liquid soap and soap dispensers for hand-washing purposes, toilet paper and disposable towels at pre-identified points must be available;
- (h) a HCP for sanitation and continuous cleaning including a cleaning schedule providing –
- (i) a list of all the areas to be cleaned;
 - (ii) a list of all the rooms that have to be cleaned within every area;
 - (iii) the name of the person responsible for the cleaning of each area, section or room;
 - (iv) for each room within a particular area, a detailed description of the cleaning of each structure, including –
 - (aa) the frequency of cleaning;
 - (bb) step by step methods of cleaning;
 - (cc) data of the chemicals which are used, such as registration data, safeness, dilutions, application prescriptions;
 - (dd) the correct application of the detergents such as dilution, temperatures and contact times;
 - (ee) the rinsing off of applied chemicals; and

- (ff) the results to be obtained as an objective of the cleaning programme;
- (v) an addendum for each room in which the cleaning of each structure must be described in detail including aspects such as method, frequency and target results;
- (vi) for the training of cleaning teams in the execution of these programs;
- (vii) for control over the storage of detergents to prevent contamination of edible products;
- (viii) a detailed description for continuous cleaning on the processing line during processing, which must include –
 - (aa) a list of all the actions in this program including the cleaning of moving equipment and crates; and
 - (bb) a step by step description of each action;
- (ix) for these programs to be approved by a registered inspector; and
- (x) for laboratory checks as control of affectivity of the cleaning programs to be instituted and documented;
- (i) a HCP for availability and quality of water in terms of which –
 - (i) the owner of the abattoir must account for the source of water supply and the status of such water;
 - (ii) the owner must be able to demonstrate the water distribution system within the abattoir and provide an updated schematic plan of the water distribution on the premises;
 - (iii) a sampling program must be followed to ensure that all outlets, including water hoses are checked on a repeated consistent basis within an allotted period of time, and the sampling procedure must be described; and
 - (iv) the owner is responsible to ensure that water used in the abattoir is potable and that records of microbiological and chemical water test results are available;
- (j) a HCP for vermin control in terms of which the owner of the abattoir must provide a written control program for each vermin type for approval by the provincial executive officer, and such program must include –
 - (i) schematic drawings indicating the position of bait stations;
 - (ii) a poison register, including specifications for the use of different poisons; and
 - (iii) training programs for persons working with poisons;
- (k) a HCP for waste disposal, including condemned material, in terms of which –
 - (i) the owner of the abattoir must provide a written control program for the removal of each different category of waste material including general refuse removal for approval by the provincial executive officer; and

- (ii) security arrangements to prevent condemned material from entering the food chain must be described;
- (l) a HCP for in contact wrapping and packing materials in terms of which –
 - (i) the owner of the abattoir must provide a written control program addressing the suitability as well as the storage and handling of all in contact wrapping and packing material;
 - (ii) control measures to prevent contamination in store rooms must be provided; and
 - (iii) control measures to prevent contamination of wrapping materials must be provided;
- (m) a HCP for maintenance, providing for the owner of the abattoir to provide a document addressing the routine maintenance of all equipment and structures; and
- (n) a HCP for thermo control in terms of which –
 - (i) a map must be provided that indicates the layout of all the chillers, freezers and processing rooms where temperature control of the rooms is required including –
 - (aa) each temperature controlled room or area;
 - (bb) the number of the room or area;
 - (cc) the temperature requirement of each room; and
 - (dd) the throughput of each room;
 - (ii) each room must be equipped with a recording thermograph, or equivalent means of monitoring and recording must be used, that indicates the temperature measurements in the room on a continuous basis;
 - (iii) the graphs or data must provide the actual time and temperature as well as the correct date;
 - (iv) annual calibration and certification to this effect must be available;
 - (v) records in respect of regular testing of digital thermographs and meters against a certified fluid in glass thermometer, done by the owner, must be available;
 - (vi) placing of the thermo-sensors within rooms must be representative of the temperature in the room;
 - (vii) if a centralized computer system is used for this purpose all the relevant temperatures must be recorded on an ongoing basis at least every 30 minutes;
 - (viii) the temperature status of every room must be checked at least every 12 hours by the owner to ensure maintenance of temperatures and all deviations must be accounted for;
 - (ix) checks by the owner must be recorded on the temperature control records;

- (x) any deviations from the required temperature must receive immediate corrective attention;
- (xi) the hygiene manager must be notified immediately in every case where a temperature breakdown has occurred;
- (xii) records must be available for inspection by the national executive officer or provincial executive officer; and
- (xiii) the hygiene manager must indicate daily control checks by way of signature on the records.

5. TRAINING

5.1 A separate program must be compiled for training.

5.2 Training is absolutely essential in the effective implementation of any HMS.

The following must be considered:

5.2.1 Training courses must be developed and training schedules adhered to.

5.2.2 Training material must be of high standard – if necessary make use of consultants.

5.2.3 Training records must be kept.

5.2.4 Competency checks must be made on workers.

5.2.5 Cases of non-compliance must be recorded and CA's implemented.

5.2.6 Repeated cases of non-compliance and malicious neglect must lead to disciplinary action – records must be kept.

5.3 Examples of training include:

5.3.1 Training of all personnel in the principles of the code of conduct pertaining to personal hygiene.

5.3.2 Workers handling live animals.

5.3.3 Workers stunning and bleeding animals.

5.3.4 Slaughter men at different workstations.

5.3.5 Workers in the sanitation team.

5.3.6 Workers doing deboning and cutting of meat.

5.3.7 Workers packing meat.

5.3.8 Workers outloading meat and products.

Many other examples will be mentioned in HMP's.

6. REGISTERS

6.1 The HM and his/ her control team must create check registers for control points.

- 6.2 The HM must:
 - 6.2.1 Ensure that control points to monitor each possible hazard is identified and documented.
 - 6.2.2 Establish critical limits for control points.
 - 6.2.3 Establish a monitoring and checking system for each control point.
- 6.3 The following are examples of registers that may be required in the HMP's:
 - 6.3.1 Daily checking of steriliser temperatures
 - 6.3.2 Checking for availability of soap
 - 6.3.3 Availability of disposable hand drying towels
 - 6.3.4 Availability of toilet paper
 - 6.3.5 Checking of prescribed shooting and bleeding procedures
 - 6.3.6 Training of workers
 - 6.3.7 Checking for compliance with job descriptions
 - 6.3.8 Recording checks on carcasses for soiling
 - 6.3.9 Chemicals used in cleaning program
 - 6.3.10 Daily pre-operative checks for cleanliness
 - 6.3.11 Checks on the continuous cleaning program
 - 6.3.12 Cleaning of intermediate water storage tanks
 - 6.3.13 Inspection of intermediate water storage tanks
 - 6.3.14 Daily checks on chlorine levels of water
 - 6.3.15 Checks on the water chlorination alarm system
 - 6.3.16 Checks on pest control program
 - 6.3.17 Checks on suitability of wrapping and packing material
 - 6.3.18 Checks on store rooms for wrapping and packing materials
 - 6.3.19 Checks on store for chemicals used in cleaning program
 - 6.3.20 Checks on vapour contamination
 - 6.3.21 Checks on meat inspection procedure
 - 6.3.22 Checks on temperatures
 - 6.3.23 Calibration of thermographs

- 6.3.24 Calibration of laboratory test equipment
- 6.3.25 Maintenance of buildings and facilities
- 6.3.26 Effluent and waste disposal
- 6.3.27 Disposal of condemned/ inedible products
- 6.3.28 Checking of hand wash facilities
- 6.3.29 Checking illumination
- 6.3.30 Frequent change of footbaths
- 6.3.31 Checking vehicles transporting slaughter animals.

7. RECORDS

- 7.1 It is essential to create a "user friendly" system of record keeping.
- 7.2 Examples of records that must be kept, include:
 - 7.2.1 Data obtained from check registers
 - 7.2.2 Non-compliance report cards and verification by HM
 - 7.2.3 Movement permits
 - 7.2.4 Ante-mortem cards
 - 7.2.5 Laboratory results etc.
- 7.3 Statistical analysis of all programs/checks/results etc. must be summarised a tendencies report must be submitted to top management during regular Hygiene meetings.
- 7.4 The frequency of these meetings can be based on the hygiene performance of the abattoir.
- 7.5 It is suggested initially not less than weekly and later not less than monthly.

PART V: MARKING, LABELING AND INSPECTION OF EXPORT CONSIGNMENTS

8. Specifications for stamps, marks and ink used

- 8.1 (1) All stamps or roller marks used to mark any carcass or meat must –
- (a) be constructed of a non-toxic, non corrosive material and must be so constructed as to be readily cleanable;
 - (b) be cleaned and sterilized regularly during use;
 - (c) be kept away from the floor;
 - (d) be kept and used under control of a registered inspector;
 - (e) be secured by a registered inspector when not in use and kept in safe custody;
 - (f) never be used at an abattoir where the abattoir number differs from the number on the stamp; and
 - (g) be applied in such a manner that the mark is clearly legible on the carcass or meat.
- (2) The following stamp shapes are required:
- (a) All species:



(High throughput)

- (3) The stamps must contain –
 - (a) the abattoir registration number; and
 - (b) the wording shown in subregulation (2) which must be in at least two official languages, one of which must be English.
- (4) The minimum sizes of stamps are –
 - (a) 60 mm in diameter for the round mark shown in subregulation (2)(a);
- (5) The letters on the stamps must be readable and may not be smaller than 8 mm high;
- (6) Marks printed on wrapping material may be smaller than the sizes stated in subregulations (4) and (5) to suit particular circumstances provided they are approved by the provincial executive officer.
- (7) The marking ink used where stamps are applied to carcasses or meat must be manufactured of harmless, edible ingredients approved for use on foodstuffs as described in the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972).
- (8) The marks must be placed, in case of ostriches – one on each side of the breast as well as on each thigh.

Wrapping, packing and labelling

- 8.2 (1) All labels used on meat must –
- (a) be printed on food grade paper or plastic printing material and treated in the same hygienic way as in contact wrapping material; and
 - (b) include the information required by regulation 97(3) as well as any other information required by the provincial executive officer.
- (2) Wrapping bearing the mark of approval may not be re-used after opening.
- (3) In the case of bulk packing, containers or cartons must be clearly marked with a facsimile of the mark of approval clearly visible and of readable size.
- (4) A container must be clearly marked on both ends with information required by the Agricultural Products Standards Act, 1990 (Act No.119 of 1990), as well as –
- (a) the name, address and registration number of the establishments in which the meat was packed;
 - (b) the net weight of the contents;
 - (c) an accurate description of the contents;
 - (d) the date packaged or a code which enables the date of packaging to be determined; and
 - (e) directions regarding the temperature at which the product must be stored.

- (5) Where products are individually wrapped, food grade wrapping material on which the mark of approval is printed or a label, printed with such mark, must be used.

General

- 8.3 (1) No person may place a mark on, or remove a mark from, any carcass, part thereof, meat or a wrapping, packing or container, except under the supervision of a registered inspector.
- (2) The registered inspector may at any time re-inspect a carcass or meat, in an abattoir, notwithstanding that it may already have been passed for consumption and, if upon re-inspection he or she is of the opinion that it is no longer fit for human or animal consumption, he or she must remove the stamp of approval by trimming, and such meat must be condemned.

Export

- 8.4 (1) All cartons must be sealed with stick-on labels with the health mark described below printed on it. All the labels must be numbered with a consecutive serial number. The serial number must be printed outside the oval. Furthermore, this health mark may not be printed directly onto the cartons. The labels must be applied to each carton in such a way to ensure that they are torn when the carton is opened.
- (2) The operator in charge of the slaughterhouse and cutting plant must record the serial numbers for cartons packed on each day in a register used for this purpose. This is to enable us to identify unauthorised use of the name or allocated number of your establishment.
- (3) The health mark for the red meat must be an oval mark at least **6,5 cm** wide by **4,5 cm** high, bearing the veterinary approval number of the establishment in the centre.

The letters must be at least **0,8 cm** high and the figures at least **1 cm** high.

Example:



8.6 Inspection Of Export Consignments

- (1) All export consignments must be inspected by the Official State Veterinarian before export.
- (2) Special attention must be paid to:
 - a. Core and surface temperature of products at time of loading;
 - b. Cleanliness of the vehicle/container before loading;
 - c. Temperature of the loading space at time of loading;
 - d. Condition of the cartons to be dispatched.;
 - e. Verify by spot checks that cartons in the consignment are correctly supplied with the establishment number and that the numbers are applied in such a way that they will be destroyed when the carton is opened. Ensure that the number is not pre-printed directly on the cartons. The following information shall also be recorded on the outside of cartons:
 - i. Name of Company
 - ii. Name of product (including species)
 - iii. Mass
 - iv. Date of production
 - f. Verify the details as supplied on the International sanitary certificate;
 - g. Sealing of the loading space must be done under the supervision of the State Veterinarian.

Under no circumstances may an International sanitary certificate be issued for a consignment not inspected by the Official State Veterinarian. This is to ensure compliance with the aforementioned.

- h. A statistical report must be submitted monthly to the Controlling Authority before the 6th of the next month.
- i. The Official State Veterinarian is responsible for verification of the Hygiene Management System (see Schedule 2 – VP/13/2003-09).

PART VI: OTHER VETERINARY PROCEDURAL NOTICES APPLICABLE TO THE EXPORT OF OSTRICH MEAT AND MEAT PRODUCTS

1. VPN/01 Procedure to register establishment.
2. VPN/04 Standard for the registration and maintenance of registration of an ostrich farm for export status.
3. VPN/15 Standard for the microbiological monitoring of meat.
4. VPN/16 Standard for the microbiological monitoring of water.
5. VPN/17 Principles of Certification.
6. VPN/18 Law Enforcement at Export Establishments.
7. VPN/19 Standard relating to the National Residue monitoring Programme.