

Department of Agriculture

National Directorate Animal Health

Notice No. VPN/2002/12	Date: 19 August 2002
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TO: STATE VETERINARY OFFICERS

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

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PART I

INTRODUCTION

1. AN ORGANISATIONAL 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 bird before slaughter. In addition, it must be guaranteed that every carcass of birds slaughtered for the export market will be inspected under the supervision of an official state veterinarian. Only products obtained from birds 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 New Castle disease.

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 Systems 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. A sliding scale of the number of official personnel can be devised. These official meat inspectors can also be utilized in monitoring the post mortem inspections (or primary meat inspection).

- 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.
- 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 PRE-SLAUGHTER HEALTH INSPECTION

2.1 OFFLOADING OF LIVE CHICKENS 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 Vehicles waiting to off-load live poultry and crates with live poultry after offloading must be parked or put in a shaded area while maintaining ventilation through crates.
- 2.1.2 Crates with live poultry must be handled in such a manner as to avoid unnecessary suffering, injury, pain and excitement of birds.
- 2.1.3 Birds in crates must be slaughtered within four hours of arrival at the abattoir and must not be kept overnight.
- 2.1.4 Trucks and crates for the conveyance of live birds to the abattoir must be washed after delivery and before leaving the premises only at facilities provided for this purpose.

2.2 Health Certification

2.2.1 No poultry may be slaughtered in an abattoir without a declaration of health status having been submitted –

- (1) in the case of a low throughput abattoir, on the day of slaughter;
- (2) in the case of a high throughput abattoir, 72 hours prior to slaughtering; and
- (3) the owner of the poultry must provide the above mentioned declaration.

2.2.2 Such health declaration must contain the following information:

- (1) date of delivery;
- (2) name and address of owner/farm(s)/fowl house number;
- (3) number of birds and specie(s);
- (4) average weight of birds;
- (5) health status of the flock(s) including mortality rate; and
- (6) medication, if given as well as withdrawal periods and dates;

2.3 Ante-Mortem Inspection

2.3.1 No poultry having been treated with antibiotic, coccidiostats or any other substance that may render the carcass, viscera or organs unfit for human consumption by reason of any residues remaining therein may be submitted for slaughter unless the withdrawal period prescribed to such substance has expired.

2.3.2 No bird suffering from any disease or condition that may adversely affect the meat may be slaughtered.

- 2.3.3 Ante-mortem inspections of poultry must be done by the authorised poultry meat inspector on the day of slaughter to ensure that the necessary arrangements can be made to accommodate suspect flocks or flocks that are suffering from a disease.
- 2.3.4 The slaughtering of poultry, affected by a controlled disease may not be carried out without the prior permission of the authorised person.
- 2.3.5 Poultry affected by disease, excessive soiling, varying bird size, or any other condition that may lead to contamination of other birds must be slaughtered at the end of the shift.
- 2.3.6 Poultry that died during transportation from the farm to the abattoir, must be placed in leakproof lockable containers with tight fitting lids, which are marked with the letters "CONDEMNED" in the case of low throughput abattoirs and in high throughput abattoirs in a room provided for storage awaiting disposal, if not removed on a continuous basis.
- 2.3.7 No dead poultry may be presented for slaughter or brought into any area where approved poultry products are handled and must be regarded and handled as condemned.
- 2.3.8 If post-mortem examinations are performed on D. O. A. 's (dead on arrivals) to establish the reason for death, it must be performed in a special room or area with adequate facilities.

2.4 PRE-SLAUGHTER HEALTH INSPECTION

- 2.4.1 The official veterinarian of the slaughterhouse may authorize the slaughter of a consignment of poultry from a holding only, without prejudice to the certificate shown in Model 5 in Annex IV to Directive 90/539/EEC, where:
- (i) The poultry intended for slaughter is accompanied by the health attestation provided for in Annex IV; or,
 - (ii) 72 hours before the arrival of the poultry at the slaughterhouse he was in possession of a document to be determined by the competent authority containing:
 - Relevant up-to-date information regarding the flock of origin, in particular details taken from the holding's records referred to in 27(a) covering the type of poultry to be slaughtered,
 - Proof that the holding of origin is under the supervision of an official veterinarian.

This information must be assessed by the official veterinarian prior to deciding what measures are to be taken with respect to fowl coming from the holding concerned, particularly the type of pre-slaughter inspection.

- 2.4.2 Where the conditions provided for in (a) are not met, the official veterinarian of the slaughterhouse may either postpone slaughter or - where compliance with the welfare rules requires - authorize slaughter having first carried out the tests provided for under 27 (b), and must have an official veterinarian inspect the holding of origin of the fowl concerned with a view to obtaining this information. Any costs associated with the application of this paragraph shall be charged to the farmer in accordance with rules to be decided on by the competent authority.

- 2.4.3 However, in the case of farmers with an annual production of not more than 20 000 domestic fowl, 15 000 ducks, 10 000 turkeys, 10 000 geese or an equivalent quantity of the other species of fowl referred to in point 1 of the second paragraph of Article 2, the pre-slaughter inspection referred to in 27 (b) may be carried out at the slaughterhouse. In that case the farmer must provide a declaration to the effect that his annual production does not exceed the said figures.
- 2.4.4 The farmer must keep for a minimum of two years the records referred to in point 27(a) for submission to the competent authority on demand.
- 2.4.5 The owner, the person authorized to dispose of the poultry or their representative must facilitate the pre-slaughter inspection operations and in particular assist the official veterinarian in any handling deemed necessary.

The official veterinarian must carry out the pre-slaughter inspection in accordance with professional rules, in adequate lighting.

- 2.4.6 Pre-slaughter inspection on the farm of origin referred to in point 25 shall comprise:
- (a) Checking of the farmers' records, which must include at least the following, depending on the type of poultry:
- Day of arrival of the birds,
 - Source of the birds,
 - Number of birds,
 - Actual performance of the particular breeds (e.g. weight gain),
 - Mortality,
 - Suppliers of feeding stuffs,
 - Type, period of use and withdrawal periods of feed additives,
 - Consumption of feeding stuffs and water,
 - Examination and diagnosis of the attending veterinarian, together with any laboratory results,
 - Type of any medicinal product, with dates of administration and withdrawal, given to the birds,
 - Date and type of any vaccines given,
 - Weight gain during the fattening period,
 - Results of any previous official health inspections of birds from the same flock,
 - Number of birds sent for slaughter,
 - Expected date of slaughter;
- (b) The additional examination needed to establish a diagnosis where the birds:
- (i) Are suffering from a disease, which can be transmitted to humans or to animals or are behaving, on an individual or collective basis, in such a way as to indicate that such a disease may occur;
- (ii) Show disturbance of general behaviour or signs of sickness which may make the meat unfit for human consumption;
- (c) Regular sampling of water and feed with a view to checking compliance with withdrawal periods;
- (d) The results of tests for zoonotic agents carried out in accordance with Directive 92/117/EEC.

2.4.7 At the slaughterhouse, the official veterinarian shall ensure that the poultry is identified, check compliance with Chapter II of Directive 91/628/EEC (2) and in particular check whether the poultry has suffered injury during transport.

Moreover, in the event of doubt concerning the identity of a consignment of poultry and where the poultry must undergo pre-slaughter health inspection at the slaughterhouse in accordance with point 25 (c), the official veterinarian must examine each crate if the poultry show the symptoms referred to in point 27 (b).

2.4.8 Where the poultry has not been slaughtered within three days of its examination and the issue of the health attestation provided for in point 25 (a) (i):

Where the poultry has not left the holding of origin, a new health attestation must be issued,

Or, after assessing the reasons for the delay, the official veterinarian of the slaughterhouse shall authorize slaughter if there is no health reason to prevent it, if need be following a further examination of the poultry.

2.4.9 Without prejudice to the requirements of Directive 91/494/EEC, slaughter for the purpose of human consumption must be forbidden if the clinical symptoms of the following diseases have been established:

- (a) ornithosis;
- (b) salmonellosis.

The official veterinarian may, at the request of the owner of the poultry or of his representative, authorize the slaughter at the end of the normal slaughter process provided precautions are taken to keep to a minimum the risk of spreading bacteria and to clean and disinfect the facilities after the slaughter, with the meat resulting from the slaughter being handled as if it were meat declared unfit for human consumption.

2.4.10 The official veterinarian must:

- (a) Forbid slaughter where he has evidence that the meat from the animals concerned would be unfit for human consumption;
- (b) Postpone slaughter were the withdrawal period for residues have not been respected;
- (c) Ensure, with regard to clinically healthy poultry from a flock slaughter of which is obligatory under a programme for the control of infectious disease, that the poultry is slaughtered at the end of the day or under conditions such that any contamination of other poultry is avoided. Member States may dispose of this meat in their territories according to their national rules.

2.4.11 The official veterinarian must immediately notify the competent authority of any prohibition of slaughter, giving reasons, and provisionally place the poultry affected by that slaughter prohibition in safekeeping.

PART III

POST MORTEM INSPECTION

3. POST-MORTEM INSPECTION

- 3.1 It is duty of the Official State Veterinarian to supervise the Post-mortem meat inspection of the meat inspection team of all poultry carcasses as per Schedule 1 (attached).
- 3.2 The Official Veterinary Surgeon 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 Veterinarian must inspect all suspect poultry 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 **batch** numbers of relevant carcasses.
- 3.5 Records must be kept of all carcasses not fit for export providing reasons therefore.

SCHEDULE 1
POST MORTEM INSPECTION

POST MORTEM MEAT INSPECTION OF POULTRY

General

1. All relevant information, including ante mortem and health records must be taken into consideration when doing meat inspection.
2. No poultry, rough or red offal may be cut/sold/dispached from an abattoir unless inspected and approved by a **authorised person**.
3. No person may process a carcass or meat until it has been inspected and approved by the authorised person.
4. No person may remove any sign/evidence of any disease/condition/contamination/soiling in a carcass or its viscera before inspection.
5. Evisceration must be such as to expose the organs and the body cavity for proper examination by the authorised person.
6. No viscera or any part thereof may be removed from any dressed poultry, prior to inspection.
7. The authorised person must inspect the carcass and viscera by viewing, palpation and, if necessary, incision.
8. All viscera/organs must be correlated with the carcass of origin until the final inspection is completed.

First inspection point

9. Meat inspection must take place at the First Carcass Inspection Point, situated just after defeathering and prior to removal of heads and feet and pre-evisceration wash.
10. Inspection procedures at the First Carcass Inspection Point:
 - (1) The whole carcass, including the head and feet, must be inspected;
 - (2) Only carcasses that will be totally condemned must be removed from the line, trimming of carcasses must not be done at the First Carcass Inspection Point;
 - (3) Where trimming has to be done, carcasses must remain on the line and trimming to be done at the detention and recovery area;
 - (4) Carcasses coming into contact with re-circulated, contaminated water used for the conveyance of feathers, are unsafe for human consumption and must be totally condemned; and
 - (5) Carcasses accidentally coming into contact with the floor may be recovered by rinsing the carcass under running potable water containing bactericidal levels of a chemical approved by the National Executive Officer for the use on foodstuffs.
11. The meat examiner/inspector must, when inspecting a carcass and its organs, give special attention to –
 - (1) state of nutrition;
 - (2) completeness of bleeding;
 - (3) trauma;
 - (4) evidence of disease/condition;
 - (5) colour;
 - (6) odour;
 - (7) consistency;
 - (8) conformation; and
 - (9) any other abnormalities.

Second inspection point

12. Meat inspection must be done at the Second Carcass Inspection Point situated after evisceration has taken place.
13. Inspection procedures at the Second Carcass Inspection Point:
 - (1) Hock joints and skin surface must be observed;
 - (2) Observe the back of the carcass;
 - (3) Observe the wings, legs, thighs and breast;
 - (4) Inspect by observation the body cavity, air sacs, lungs, heart, liver, spleen, gizzard, intestines, cloaca and bursa; and
 - (5) Remove diseased carcasses for further inspection.
14. Depending on the judgement, the following may be done with the carcass, organ or meat:
 - (1) Approved for human or animal consumption;
 - (2) Partially approved;
 - (3) Conditionally approved; or
 - (4) Condemned totally.

Detention and Recovery

15. Where carcasses require partial condemnation as a result of a minor localized lesion and this condition is of such a nature that it holds no meat safety risk the quality controller may do the necessary trimmings and partial condemnation at the portioning section and approve the rest of the carcass or viscera.
16. Carcasses that require removal from the line, due to conditions that hold a meat safety risk and renders it unsafe for human or animal consumption, such detained carcasses must be kept apart from healthy carcasses.
17. Trimming and recovery of portions that can be approved for human and animal consumption, must be –
 - (1) done in a separate room/area as prescribed;
 - (2) done by an authorised meat examiner;
 - (3) washed under running chlorinated water;
 - (4) chilled; and
 - (5) utilized as a frozen product only.

Returns

18. Inspected and approved poultry carcasses that have left the abattoir may be returned to the abattoir for re-inspection and re-packaging, provided –
 - (1.) only wrapped and packed whole carcasses and portions are to be accepted;
 - (2.) no frozen blocks of intestines, gallbladders and heads and feet are accepted except for sterilisation;
 - (3.) a room or facility approved by the PEO is available for the handling of "returns";
 - (4.) the re-introduced product is examined by the authorised person on arrival, and found to be free of any signs of contamination or spoiling and to be unconditionally fit for human consumption;
 - (5.) any poultry carcasses, parts thereof or offal, included in whole birds, brought into an abattoir and found to be contaminated, spoiled or unsafe for human consumption, must be condemned;
 - (6.) the wrapping still bears the original marking of the abattoir of origin;
 - (7.) on receipt, the temperature of products do not exceed 7°C and is not less than minus 1 °C;
 - (8.) the Director may impose any additional hygiene requirements in respect of facilities and procedures of cutting-up, packing, cooling, storage and transportation;
 - (9.) no imported poultry meat may be handled in an abattoir without the written approval of the provincial executive officer;
 - (10.) it is only utilized for frozen products;
 - (11.) movement or re-introduction of poultry meat, carcasses, parts thereof and red offal between an abattoir and further processing plants is permitted, provided that the requirements for transport of meat are adhered to and approved by the PEO; and

Criteria for meat inspection and judgements

19. If poultry, upon either ante- or post mortem inspection, is found on reasonable suspicion to be suffering from any notifiable diseases or conditions, referred to in the Animal Diseases Act, the local provincial state veterinarian must be notified immediately.
20. The entire carcass and organs must be condemned if –
 - (1) any disease is accompanied by emaciation, and/or dehydration;
 - (2) advanced pathological changes are observed;
 - (3) a condition has so spread that affected portions or organs cannot easily be separated;
 - (4) a disease is peracute, acute, severe or advanced;
 - (6) the conditions of the carcass, meat or viscera to be aesthetically unacceptable; or
 - (7) contaminated
21. Portions of the carcass and organs must be condemned if they are –
 - (1) affected by disease;
 - (2) contaminated;
 - (3) severely bruised;
 - (4) in any other way rendered unsafe for human consumption; or
 - (5) soiled.
22. Portions of poultry may be approved where removal and condemnation of affected parts or organs can be done.
23. The owner of an abattoir must keep record on a daily basis of the number of birds that have been slaughtered and the number of carcasses/portions that have been condemned and their condemned weight.
24. The provincial executive officer may specify the maximum throughput of the abattoir and the hourly rate at which poultry on a particular line may be slaughtered and specify the number of meat inspectors/ examiners necessary to render a proper and complete meat inspection service.
25. The provincial executive officer may require additional meat inspectors/examiners after having considered the abattoir design, number of inspection stations, line speed, different types of poultry, structural and managerial aspects and health status of the poultry.
26. At high throughput abattoirs the services of a veterinarian must be available.

PART IV

HYGIENE CONTROL

4. VERIFICATION OF A HYGIENE MANAGEMENT SYSTEM (HMS)

It is the function and responsibility of management to implement a approved (however named) Quality Assurance (QA) system. Furthermore it is the responsibility of management to validate on a continuous basis the effectivity of such a system.

It is however essential that such a QA 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 on accurate representation of the systems and procedures implemented at the establishment to assure the highest possible hygiene standard and safety of the poultry 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 water (VPN/2002/14) and meat (VPN/2002/13).

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

HYGIENE MANAGEMENT SYSTEM FOR POULTRY ABATTOIRS

1. The owner of an abattoir must –
 - (1) 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;
 - (2) provide relevant records of observations/checks/measurements or results;
 - (3) provide sampling programs for laboratory analyses, as well as names of laboratories to do the required analysis;
 - (4) provide written accounts of decisions relating to corrective actions when taken.
 - (5) 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/she may require.
2. An effective document management system must provide for –
 - (1) the retrieval of documents relating to an identified production batch;
 - (2) a register for the recording of each production batch containing information regarding date of slaughter, species slaughtered, mass/quantities, identification and destination, must be provided;
 - (3) a documented product recall procedure approved by the provincial executive officer must be provided.
3. Management must provide an updated schematic plan of the establishment which must include the following details:
 - (1) All the different areas on each level;
 - (2) All the different rooms in each area identified indicating the process or operation including the capacities or rates of operation that takes place in such rooms;
 - (3) The flow of the product;
 - (4) Ancillary structures on the premises;
 - (5) For rooms where temperature control is prescribed, the required temperature as well as the capacity of the specific room must be indicated;
 - (6) Different ablution facilities for workers in clean and dirty areas as well as the personnel entrances to the different areas must be indicated on the plan;
 - (7) All entrances to rooms/areas/building;
 - (8) Boundaries indicating entrances/exits to and from premises.
4. Management must provide a flow diagram of the slaughter process which includes –
 - (1) all steps involved in the process, including delays during or between steps, from receiving of the poultry to placing of the end product on the market;
 - (2) sufficient 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 establishment, personnel routes and hygienic practices, product storage and distribution procedures;
 - (3) confirmation, on site, during operational hours.
5. Management must provide a list of all potential biological, chemical or physical hazards that may occur at each step of the process including –
 - (1) unacceptable contamination or recontamination of a biological, chemical or physical nature;
 - (2) unacceptable survival or multiplication of pathogenic micro-organisms;
 - (3) unacceptable production or persistence of toxins or other undesirable products of microbial metabolism;

6. Management must provide documented Hygiene Control Programs (HCP) approved by the provincial executive officer, to prevent, eliminate or reduce hazards mentioned in regulation 5 to acceptable levels and management must –
 - (1) ensure that control measures for each possible hazard is effectively implemented;
 - (2) establish critical limits for control points;
 - (3) establish a monitoring or checking system for each control point;
 - (4) provide documented and corrective actions that can be taken without hesitation when a deviation is observed and such corrective action must include –
 - (a) proper identification of the persons responsible for the implementation of the corrective action;
 - (b) a description of the means and action required;
 - (c) action to be taken with regard to the meat having been processed during the period when the process was out of control;
 - (d) written record of measures taken;
7. The following Hygiene Control Programs (HCP) must be implemented:
 - (1) HCP for ante mortem inspection, including control measures to –
 - (a) ensure that all poultry which for some reason or other cannot be processed into safe meat are identified and handled with in a prescribed manner;
 - (b) identify poultry with symptoms not seen during post-mortem meat inspections;
 - (c) identify poultry with zoonotic diseases;
 - (d) identify poultry with highly contagious or controlled diseases;
 - (e) identify poultry that pose a high contamination risk such as those with septic conditions or birds that are excessively soiled; and
 - (f) ensure that injured birds in obvious pain are presented for emergency slaughter;
 - (2) HCP for slaughter and dressing.
 - (a) Control Measures (CM) must be taken to ensure that no contamination of meat and edible products occur either from:
 - (i) External surface of the bird slaughtered;
 - (ii) Wind and dust;
 - (iii) Contents of hollow organs;
 - (iv) Persons working with edible products; and
 - (v) Contact with unclean objects;
 - (b) Slaughter and dressing procedures must limit any contamination to the absolute minimum;
 - (c) All workers must be trained in correct slaughter techniques including principles of hygiene practices and be monitored effectively;
 - (d) A programme for the daily checking of carcasses for soiling must be compiled to provide for regular checking of a representative sample of carcasses throughout the day on a random basis to determine the levels of contamination of carcasses;

- (3) HCP for meat inspection – The supervisory registered meat inspector (SMI) assisted by the registered veterinarian must monitor meat inspection by means of implementation of documented HCP's/CM's to ensure –
- (a) that meat inspection is done according to these regulations;
 - (b) the competency of the meat inspectors and meat examiners;
 - (c) the personal hygiene of the meat inspectors and meat examiners;
 - (d) that head, red and rough offal are correlated to the carcass of origin;
 - (e) the security of detained carcasses and organs;
 - (f) the security of provisionally passed carcasses and organs;
 - (g) the security of the stamp of approval; and
 - (h) the security of condemned material;
 - (i) the implementation of standard operational procedures (SOP's) for –
 - (i) emergency slaughter;
 - (ii) preferential slaughter;
 - (iii) provisional slaughter;
 - (iv) slaughter of poultry which have reacted positively to tests done on the farm, for certain diseases;
 - (v) dirty birds; and
 - (vi) dropped meat;
- (4) HCP for personal Hygiene of workers in that –
- (a) a general code of conduct for personnel and in particular or workers who come into direct contact with meat and edible products, approved by the registered inspector, must be available;
 - (b) a training program as well as registers of attendance for all personnel to apply the principles of the code of conduct referred to in 7(4)(a) must be available; and
 - (c) record of surveillance/supervision including records of disciplinary action in cases of repetitive misconduct/non compliance must be available;
- (5) HCP for medical fitness of workers –
- (a) Record of initial medical certification that workers are fit to work with meat and edible product, prior to employment must be available; and
 - (b) Record of daily fitness checks including corrective actions applied in cases of illness and injury, must be available;
- (6) HCP for steriliser temperatures and maintenance of sterilisers – control measures to ensure the continuous availability and accessibility of sterilisers in good working order at temperatures of 82 °C, including registers for daily checks indicating frequency of check as well as corrective action procedures in cases of non-compliance must be available;
- (7) HCP for the availability of liquid soap and soap dispensers, toilet paper, and disposable towels – 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;

- (8) HCP for sanitation and continuous cleaning including a cleaning schedule provided by management providing for the following information:
- (a) A list of all the areas to be cleaned;
 - (b) A list of all the rooms that have to be cleaned within every area;
 - (c) The name of the person responsible for the cleaning of each area, section or room;
 - (d) For each room within a particular area the cleaning of each structure must be described in detail including the following aspects:
 - (i) Frequency of cleaning;
 - (ii) Prescribed step by step methods of cleaning;
 - (iii) Data concerning the chemicals which are used (e.g. registration data, safeness, dilutions, application prescriptions etc.);
 - (iv) Correct application of the detergents (dilution, temperatures, contact times);
 - (v) Rinsing off of applied chemicals; and
 - (vi) Target results to be obtained as an objective of the cleaning programme;
 - (e) An addendum must be added for each room in which the cleaning of each structure must be described in detail including aspects such as method, frequency and target results;
 - (f) Cleaning teams will be trained in the effective execution of these programs;
 - (g) Control over the storage of detergents to prevent contamination of edible products is important;
 - (h) A detailed description must be compiled for the continuous cleaning on the processing line during processing and must include –
 - (i) a list of all the actions in this program;
 - (ii) a step by step description of each action;
 - (i) These programs must be approved by the registered inspector; and
 - (j) Laboratory checks as control of effectivity of the cleaning programs must be instituted and documented;
- (9) HCP for availability and quality of water:
- (a) The owner of the abattoir must account for the source of water supply and the status of such water;
 - (b) 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;
 - (c) A sampling program must be followed to ensure that all outlets, including water hoses must be checked on a repeated consequential basis within an allotted period of time. The sampling procedure must be described and documented; and
 - (d) The owner is responsible to ensure that water used in the abattoir is potable. Records of microbiological and chemical water test results must be available;
- (10) HCP for vermin control:
- (a) The owner of the abattoir must provide a documented control programs for each vermin type for approval by the relevant authorities 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;

- (11) HCP for waste disposal including condemned material:
- (a) The owner of the abattoir must provide documented control program for the removal of each different category of waste material including general refuse removal for approval by the relevant authorities; and
 - (b) Security arrangements (measures) to prevent condemned material from entering the food chain must be described;
- (12) HCP for in contact wrapping and packing materials:
- (a) The owner of the abattoir must provide a documented control program addressing the suitability as well as the storage and handling of all in contact wrapping and packing material;
 - (b) CM's to prevent contamination in store rooms must be provided; and
 - (c) CM's to prevent contamination of wrapping materials;
- (13) HCP for maintenance – the owner of the abattoir must provide a documented CP addressing the routine maintenance of all equipment and structures;
- (14) HCP for thermo control:
- (a) A map must be provided that indicates the layout of all the chillers, freezers and processing rooms where temperature control of the room is required and must include the following details:
 - (i) Each temperature controlled room or area;
 - (ii) Number of the room or area;
 - (iii) Temperature requirement of each room; and
 - (iv) Throughput (capacity) of each room;
 - (b) 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;
 - (c) The graphs or data must provide the actual time and temperature as well as the correct date;
 - (d) Annual calibration is necessary and certification to this effect must be available;
 - (e) Records in respect of regular testing of digital thermographs/meters against a certified fluid in glass thermometer, done by management, must be available;
 - (f) Placing of the thermo-sensors within rooms must be representative of the temperature in the room;
 - (g) If a centralized computer system is used for this purpose it must record all the relevant temperatures on an ongoing basis at least every 30 minutes;
 - (h) The temperature status of every room must be checked at least every 12 hours by management to ensure maintenance of temperatures and all deviations must be accounted for;
 - (i) Checks by management must be recorded;
 - (j) Any deviations from the required temperature must receive immediate corrective attention;
 - (k) The hygiene manager must be notified immediately in every case where a temperature breakdown has occurred;
 - (l) Records must be available for inspection; and
 - (m) The hygiene manager. must indicate daily control checks by way of signature on the records.

MANAGEMENT SYSTEM AIDS

1. Schematic drawing of the abattoir

- (1) The second step in the design of a H.M.S. is to obtain updated schematic drawings of the abattoir.
- (2) Schematic drawings of the abattoir should include the following:
 - (a) All the different areas on each level.
 - (b) All the different rooms in each area indicating the process or operation that takes place in the room.
 - (c) The flow of the product.
 - (d) Ancillary structures on the premises.
 - (e) For rooms where temperature control is prescribed, the required temperature, as well as the capacity of the specific room, must be indicated.
 - (f) 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.
 - (g) All entrances to rooms/areas/building.
 - (h) Any other information as required.
- (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.
- (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.
- (5) Different schematic drawings are used for different systems.
- (6) Examples are:
 - (a) Diagram indicating work stations and personnel flow, routes of entry and exit. Colour coding can indicate clean and dirty functions.
 - (b) Diagram indicating position of slaughter equipment, work stations, sterilisers, HWB's, boot washes etc.
 - (c) 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.
 - (d) 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.
 - (e) Diagram indicating bait stations for vermin control.
 - (f) Diagram indicating vapour control areas.
 - (g) Diagram indicating location sites of soap containers, disposable towels and toilet paper.
- (7) The above are but **some** of the uses these schematic drawings can be used for. No set rigid 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

- (1) This diagram should include all steps involved in the process, from receiving of the birds to be slaughtered 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) This diagram can also be fragmented to categories for specific areas/functions.

3. Hazards

- (1) The HM must compile a list of all potential biological, chemical or physical hazards that may occur at each step of the process.
- (2) Hazards may include the unacceptable contamination of carcasses or meat by:
 - (a) Biological hazards:
 - (i) Pests e.g. Blow fly larvae
 - (ii) Spoilage organisms e.g. micro-organisms, yeasts and molds
 - (iii) Pathogenic micro-organisms
 - (iv) Toxins and/ or other undesirable products of microbial metabolism
 - (b) Chemical hazards:
 - (i) Including antibiotics or other pharmacological residues, pesticides, sanitisers etc.
 - (c) Physical hazards
 - (i) Including glass, pieces of metal, soil/ dirt, hair etc.
- (3) Modern Hygiene Management Systems include ineffective chilling and breaks in the cold chain as critical hazards to meat and edible products.

4. Hygiene Control Programmes

- (1) The H.M. must create documented and approved Hygiene Management Programs to prevent, eliminate or reduce hazards identified, to acceptable levels.
- (2) Various generic Hygiene Control Programs have been developed to monitor potential hazards and will be discussed in detail. These HMP's can also collectively be known as Good Hygiene Practices (GHP's). (Derived from the GMP = Good manufacturing practices of a classical HACCP program).
- (3) These HCP's are applicable to all abattoirs and is an essential prerequisite for any HACCP program.
- (4) Examples are – programmes to address:
 - (a) Ante mortem inspection, including vehicles transporting live birds.
 - (b) Slaughter and dressing procedures, including presence of soiling.
 - (c) Meat inspections, including recovery and laboratory tests.
 - (d) Personal hygiene + Medical records of personnel.
 - (e) Steriliser temperatures and maintenance.
 - (f) Availability of soap, toilet paper, disposable towels.
 - (g) Sanitation and continuous cleaning.
 - (h) Waste disposal including disposal of abattoir effluent.
 - (i) Disposal of condemned material
 - (j) Vermin control.
 - (k) Water quality and chlorination.
 - (l) In contact materials.
 - (m) Maintenance.
 - (n) Thermo control of chillers, freezers.
 - (o) Training of all personnel.
- (5) The above are some examples of HCP's but the HM and his/ her HCT may identify other aspects of management that needs to be monitored.
 - (a) Other programs may include:
 - (i) Vapour control
 - (ii) Lighting checks
 - (iii) Ventilation checks
 - (iv) Dispatch and transport of product.

- (b) Motivate the necessity of such a program, consider whether not implementing such a management program will adversely affect the quality of the end product.

5. Training

- (1) A separate program must be compiled for training.
- (2) Training is absolutely essential in the effective implementation of any HMS.
The following must be considered:
 - (a) Training courses must be developed and training schedules adhered to.
 - (b) Training material must be of high standard – if necessary make use of consultants.
 - (c) Training records must be kept.
 - (d) Competency checks must be made on workers.
 - (e) Cases of non-compliance must be recorded and CA's implemented.
 - (f) Repeated cases of non-compliance and malicious neglect must lead to disciplinary action – records must be kept.
- (3) Examples of training include:
 - (a) Training of all personnel in the principles of the code of conduct pertaining to personal hygiene.
 - (b) Workers handling live birds.
 - (c) Workers stunning and bleeding birds.
 - (d) Slaughter men at different workstations.
 - (e) Workers in the sanitation team.
 - (f) Workers doing deboning and cutting of meat.
 - (g) Workers packing meat.
 - (h) Workers outloading meat and products.

Many other examples will be mentioned in HCP's.

6. Registers

- (1) The HM and his/ her control team must create check registers for control points.
- (2) The HM must:
 - (a) Ensure that control points to monitor each possible hazard is identified and documented.
 - (b) Establish critical limits for control points.
 - (c) Establish a monitoring and checking system for each control point.
- (3) The following are examples of registers that may be required in the HCP's:
 - (a) Daily checking of steriliser temperatures
 - (b) Checking for availability of soap
 - (c) Availability of disposable hand drying towels
 - (d) Availability of toilet paper
 - (e) Checking of prescribed stunning and bleeding procedures
 - (f) Training of workers
 - (g) Checking for compliance with job descriptions
 - (h) Recording checks on carcasses for soiling
 - (i) Chemicals used in cleaning program
 - (j) Daily pre-operative checks for cleanliness
 - (k) Checks on the continuous cleaning program
 - (l) Cleaning of intermediate water storage tanks

- (m) Inspection of intermediate water storage tanks
- (n) Daily checks on chlorine levels of water
- (o) Checks on the water chlorination alarm system
- (p) Checks on pest control program
- (q) Checks on suitability of wrapping and packing material
- (r) Checks on store rooms for wrapping and packing materials
- (s) Checks on store for chemicals used in cleaning program
- (t) Checks on vapour contamination
- (u) Checks on meat inspection procedure
- (v) Checks on temperatures
- (w) Calibration of thermographs
- (x) Calibration of laboratory test equipment
- (y) Maintenance of buildings and facilities
- (z) Effluent and waste disposal
- (aa) Disposal of condemned/ inedible products
- (bb) Checking of hand wash facilities
- (cc) Checking illumination
- (dd) Frequent change of footbaths
- (ee) Checking vehicles transporting birds to be slaughtered.

7. Records

- (1) It is essential to create a "user friendly" system of record keeping.
- (2) Examples of records that must be kept, include:
 - (a) Data obtained from check registers
 - (b) Non-compliance report cards and verification by HM
 - (c) Movement permits
 - (d) Ante-mortem cards
 - (e) Laboratory results etc.
- (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.
- (4) The frequency of these meetings can be based on the hygiene performance of the abattoir.
- (5) It is suggested initially not less than weekly and later not less than monthly.

PART V

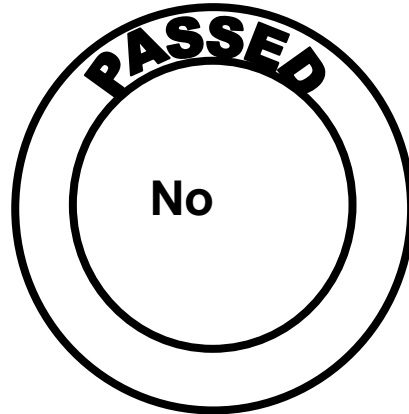
MARKING, LABELING AND INSPECTION OF EXPORT CONSIGNMENTS

8. Health Marking

Removal of unmarked carcasses and meat

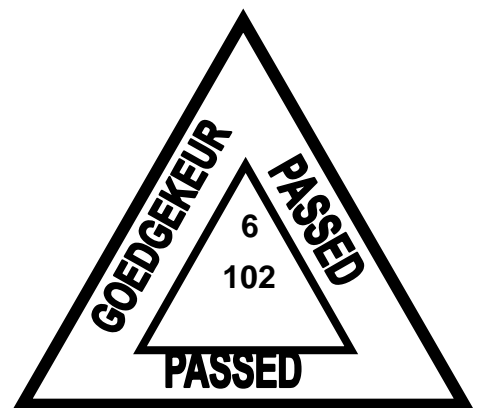
- 8.1 No person may remove any carcass, part thereof or any animal product from an abattoir if not inspected, approved for consumption and appropriately marked, provided that in the case of bulk sales of offal, marks are not required but proof of abattoir of origin may be required.
- 8.2 The following stamp shapes are required for the different species and circumstances:

- (1) All species:



- (2) Mark used by meat inspector working at several abattoirs:

E.g.: Province – 6
 Inspector no.: – 102



(3) Exemption:



8.3 The stamp must contain the following information:

- (1) Abattoir number and where applicable, the cutting/processing establishment number;
- (2) All wording on stamps must be in at least 2 official languages one of which must be English.

8.4 The marks may in case of poultry be on the wrapping and packing in sizes to suit particular circumstances provided it is approved by the provincial executive officer.

Wrapping, packing and labelling used for meat and meat products

8.5 All labels used on carcasses, meat and meat products must comply to the following:

- (1) Be printed on food quality paper/ plastic printing material; and
- (2) Include the abattoir registration number as well as any information required by the PEO.

8.6 Where the mark of approval appears on wrapping such wrapping may not be re-used after opening.

8.7 The marking of poultry carcasses is not necessary in respect of consignments of carcasses dispatched from an approved poultry abattoir to a cutting and processing plant, approved by the NEO, subject to the following conditions:

- (1) The cutting and processing plant belongs to the same owner;
- (2) The carcasses are non-individually wrapped, conveyed in bulk in baskets and transported in vehicles complying with these regulations;
- (3) The loading space of the vehicle or container is locked and sealed; and
- (4) The dispatch office as well as recipient cutting premises maintain a record of the amount, type and destination of consignments.

8.8 In the case of bulk packing such containers/cartons must be clearly marked with a facsimile of the stamp of approval clearly visible and of readable size.

- 8.9 A container must be clearly marked on both ends with the following information as well as any other information required by the Agricultural Products Standards Act:
- (1) Name and address and registration number of the establishments in which the meat was packed;
 - (2) Net weight of the contents;
 - (3) Accurate description of the contents;
 - (4) Date packaged or an approved code which enable the date of packaging to be determined;
 - (5) Directions regarding the temperature at which the product must be stored.
- 8.10 In the case where products are individually wrapped, food grade wrapping material must be used, marked in print or with a label.

Exemption from meat inspection

- 8.11 Where temporary exemption from meat inspection is granted, the identification number of the abattoir must appear on the rectangular mark as well as the wording "NOT INSPECTED".
- 8.12 Meat originating from such an abattoir may only be sold or distributed within the judicial boundaries of the local authority in which the abattoir is situated.

Ad Hoc Meat Inspection

- 8.13 A meat examiner/inspector who does meat inspection at several low throughput abattoirs as well as religious and traditional slaughtering, on an ad hoc basis, is issued with a triangular stamp as shown in regulation 6(2) indicating that the meat has been inspected – such a stamp must comply with the following requirements:
- (1) The first number indicating the province of origin followed by the registration number of the authorised person. The Provincial Executive Officer must keep a register of such authorised persons; and
 - (2) The above mark must be placed on the carcass in close proximity to the rectangular mark containing the abattoir registration number.

Responsibilities

- 8.14 No person may place a mark on or remove a mark from any carcass, part thereof, meat, or animal product or a wrapping, packing or container, except with the consent of the registered inspector.
- 8.15 When any label or other marking device has been approved, new supplies of such labels or marking devices of a character exactly similar may be procured, made or prepared for use in accordance with these regulations, without further approval.

9. Export

9.1 A carcass, part thereof, meat, processed meat or animal product intended for export must be marked in a manner and with a mark required by the importing country and approved by the National Executive Officer in respect of the abattoir concerned.

This mark must contain the Z.A. - export number allocated by the National Executive Officer for that abattoir.

9.2 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 pentagon. 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.

9.3 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 farm.

The health mark for the **poultry** 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:



10. Inspection Of Export Consignments

- 10.1 All export consignments must be inspected by the Official State Veterinarian before export.
- 10.2 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 Controlling Authority before the 6th of the next month.
- i. The Official State Veterinarian is responsible for verification of the Hygiene Management System.

11. Post mortem health inspection

- 11.1 The Official State Veterinarian is the single competent person deciding on meat being fit for human consumption following a sanitary inspection. This inspection includes ante and post mortem inspection and control of the hygienic conditions in the abattoir, cutting plant and meat storage facilities
- 11.2 Specially trained auxiliaries and assignees may assist the Official State Veterinarian in these tasks as long as the Official Veterinarian is able to supervise them on the spot.
- 11.3 Only the Official Veterinarian is allowed to certify exports.
- 11.4 The results of the post-mortem health inspections shall be recorded by the official State Veterinarian and, where diseases communicable to man are diagnosed, communicated to the competent veterinary authorities responsible for supervision of the **farm** from which the **poultry** originated, as well as to the person responsible for the said area.