Department of Agriculture

National Directorate Animal Health

Notice No.	VPN/11/2007-01
TO:	STATE VETERINARY OFFICERS
SUBJECT:	Standard for Ante Mortem and Post-Mortem Meat Inspection and Hygiene Control at Red Meat Establishments

PART I	Functions of Inspection Personnel
PART II	Offloading and ante mortem inspection
PART III	Post mortem inspection
PART IV	Hygiene Control
PART V	Marking, Labelling and Inspection of Export Consignments
PART VI	Other Veterinary Procedural Notices Applicable for the export of red meat.

THIS VPN/11/2007-01 REPLACES VPN/11/2005-06

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Date

PART I: FUNCTIONS OF INSEPCTION PERSONNEL

1. FUNCTIONS OF THE OFFICIAL VETERINARIAN

1.1 Overall responsibility:

All abattoirs must meet the requirements set in the Essential National Standards as specified in Section 11 of The Meat Safety Act, 2000 (Act No. 40 of 2000) as well as any other relevant requirements prescribed in legislation. This is especially important in the case of registered export establishments.

These requirements pertain to:

- General structural requirements.
- Grading requirements
- Specific requirements set for the species of animal to be slaughtered.
- · Requirements set for cutting (deboning) facilities.
- Auditing systems required by legislation including HAS as well as the hygiene management system (HMS).

It is the duty of the official veterinarian (OV) to ensure that these requirements are adhered to.

1.2 It is the duty of the official veterinarian to enforce the application of any of the above requirements by instructing the abattoir owner (or person in charge) to apply any corrective action he/she deems necessary in case of non-compliance.

The veterinarian must determine a priority to the act(s) of non-compliance. Minor acts of non-compliance can be addressed by verbal warnings followed by a written warning, indicating a time frame by which corrective action must be completed.

Major acts of non-compliance i.e. those having a direct detrimental effect on the safety of the products merits that an immediate instruction to stop slaughter be issued. All products processed during the period of non-compliance must be clearly identified and isolated. These products may not be released until secondary inspections prove it to be safe.

Processing/slaughter may only commence once the official veterinarian has verified that corrective actions have indeed been applied to his/her satisfaction, and written consent is given to commence production. Records of above actions must be kept and duplicate documents provided to the Provincial Executive Officer within 24 hours of serving these instructions.

- 1.3 The official veterinarian must assure him/herself that all animals presented for slaughter are healthy. In order to do so he/she must:
- 1.3.1 Monitor all documentation relating to the transport of the animals.
- 1.3.2 The receiving of the slaughter stock on the certificate of origin (annex E of VPN 2(a) and 2(b)).
- 1.3.3 Verify and record the health attestations by the PSV.
- 1.3.4 Do a comprehensive ante mortem inspection of all live slaughter stock within 12 hours prior to slaughter.
- 1.3.5 Where animals are kept in lairages for longer than 24 hours, an initial ante mortem inspection must be done within 12 hours of arrival followed by a second ante mortem inspection before slaughter.

- 1.3.6 Where animals are kept in lairages for periods in excess of 72 hours, the official veterinarian must monitor adherence to requirements and provide written permission after due consideration.
- 1.3.7 The veterinarian must provide Slaughter Certificates indicating one of:
 - Fit for slaughter.
 - Emergency slaughter.
 - Conditional slaughter.
 - · Kill and destroy.
 - Last slaughter.
- 1.3.8 With all dead on arrivals, dead in pens and cases of kill and destroy the official veterinarian must examine the dead animal to determine whether the cause of death may have a detrimental effect on the safety of meat and meat products processed at the establishment. Certification of cause of death and supporting laboratory results must be recorded.
- 1.4 The official veterinarian, assisted by the supervisory meat inspector (SMI) or meat inspectors/meat examiners, is responsible for monitoring the humane handling of all animals to be slaughtered including:
 - Transport and off loading.
 - Holding (lairaging)
 - Handling (herding)
 - Stunning (mechanical/electrical)
 - Bleeding (throat slitting)
- 1.5 The official veterinarian, assisted by the supervisory meat inspector, must monitor on a regular basis whether the meat inspectors/meat examiners do the primary meat inspection in accordance with regulatory requirements (refer to the regulations under the Meat Safety Act).

This includes monitoring of:

- Training records.
- Job descriptions per workstation.
- Supervisory check lists.
- Corrective actions in cases of non-compliance.
- Disciplinary action in cases of persistent non-compliance.

1.6 **Secondary meat inspection:**

- 1.6.1 The official veterinarian is responsible for doing the secondary meat inspection on all detained carcasses and/or organs.
- 1.6.2 This includes the taking of samples and doing any tests he/she deems necessary to assure the meat is safe. Records of results must be maintained.
- 1.6.3 The official veterinarian must maintain the records of condemned carcasses and organs and if requested to do so certify the condemnation of the carcasses, organs or parts thereof.
- 1.6.4 The official veterinarian, assisted by the supervisory meat inspector must monitor the security of condemned products as well as the method of disposal thereof.
- 1.6.5 The Official Veterinarian must monitor control system to ensure that no meat derived from carcasses retained for secondary meat inspection re-enters the export process line.

1.7 Measly meat control:

The official veterinarian, assisted by the supervisory meat inspector must:

- 1.7.1 Evaluate and approve the protocols for the method of treatment of conditionally approved measly carcasses or parts thereof intended for human or animal consumption.
- 1.7.2 Verify the application of the protocol mentioned in paragraph 1.7.1.
- 1.7.3 This includes records of thermo-control of chillers and freezers as well as core temperatures of carcasses and products.
- 1.7.4 The Official Veterinarian must monitor control system to ensure that no measly meat reenters the export process line

1.8 Record keeping:

- · Maintain records of daily slaughter and condemnations.
- The official veterinarian must be acquainted with all records pertaining to meat safety in the establishment in order to answer any query and compile any report required by Provincial and National Executive Officers.

1.9 **Primary meat inspection:**

Ensuring primary meat inspection:

- Compile job descriptions for meat inspectors, meat examiners and assistants.
- Ensure that all inspection positions are manned during slaughter.
- Provide and manage relief personnel during slaughter.
- Ensure that inspection techniques comply with legislation.
- Maintain a system ensuring that suspect carcasses and organs are detained for secondary meat inspection.
- Maintain a secure system for the removal of condemned material from the slaughter floor to the point of rendering/secure removal.
- Ensure that all meat inspection personnel maintain high personal hygiene standards.
- Maintain a system for monitoring primary meat inspection which incorporates supervisory checklists, documented corrective actions for non-compliance and disciplinary action for persistent non-compliance.
- Arrange for inspection personnel to attend refresher courses and where applicable, further study or capacity building programs.

1.10 Residue Monitoring:

For residue monitoring please refer to the VPN19 for the standard relating to the national residue-monitoring programme. In addition, the following must be adhered to:

Inspect each bovine slaughtered for the possible presence of growth promoter implants. In bovine, inspect behind the ear and in ovine in the loin area.

- Arrange for the taking of samples as required by sampling programs.
- Ensure that samples are packed and sent to required destinations.

- Maintain a proper record system to ensure proper identification of results with farms, batches, etc.
- Maintain records of follow-up actions regarding results i.e. non-compliance.

1.11 Hygiene Control:

1.11.1 Monitoring:

- Pre-operational checks to ensure that all
 - production areas are safe and clean.
 - personnel are fit and dressed in clean protective clothing.
 - critical mechanical equipment are operational.
 - critical temperatures are within prescribed ranges for operation.
- · Continuous hygiene control checks during production.

1.11.2 Auditing:

- Completion of HAS (Hygiene Assessment System) on a monthly basis.
- · Continuous verification of check registers according to the

Hygiene Management System programs:

- Ante mortem
- Meat inspection
- Slaughter and dressing procedures.
- Personal hygiene.
- Medical records.
- Availability of soap, toilet paper, disposable towels.
- Sterilizer temperature control.
- Thermo control of chillers and freezers.
- Sanitation and continuous cleaning.
- Waste disposal.
- Vermin control.
- Water quality.
- In-contact materials.
- Maintenance.
- · Verification of laboratory results regarding hygiene auditing.
- Verification of all other records pertaining to meat safety and the hygienic functioning of the establishment.
- Ultimately it is the function of the official veterinarian to provide the assurance that the meat is safe and <u>all</u> possible factors must be taken into consideration.
- 1.12 The official veterinarian is the key role player in any deliberations between the abattoir owner, Provincial Executive officer and the Department of Agriculture.

3. FUNCTIONS OF A MEAT INSPECTOR

3.1 Overall responsibility:

It is the duty of the meat inspector to assist the official veterinarian in the overall responsibility of ensuring that the abattoir meets all standards required by legislation, as set out in the official veterinarian's duty sheet.

3.2 **Primary Meat Inspection:**

- Primary meat inspection of carcasses and offal as required by legislation or as specified by the supervisor.
- Control of condemned material regarding identification and securing in the condemnation area.
- Cysticercosis control regarding proper identification of carcasses and organs and securing such meat in designated areas.
- Ensuring that suspect carcasses and offal are detained for secondary meat inspection.
- Monitoring of hygienic slaughter processes.

PART II: OFFLOADING AND ANTE MORTEM INSPECTION

2.1 OFFLOADING OF LIVE ANIMALS AT THE ABATTOIR

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

Offloading

- 2.1.1 (1) Animals arriving at an abattoir must be offloaded immediately by trained personnel.
 - (2) Animals must be offloaded in a calm manner to avoid excitement, fear, stress and injury.
 - (3) No electrical prodding of pigs and calves is allowed.
 - (4) Animals may not be picked up by their heads, fleece, skin, ears, tails, horns or legs neither must animals be forced to jump from different levels or over gaps during offloading.

Rest Periods

2.1.2 Animals must rest overnight in lairages before slaughtering, but if the OSV is satisfied that they are rested, they may be slaughtered on the day of arrival.

Lairaging

- 2.1.3 (1) Animals awaiting slaughter must be held in lairages and pens complying with regulations.
 - (2) Lairages must be cleaned after each batch of animals has been removed.
 - (3) Clean drinking water must be available at all times for animals awaiting slaughter.
 - (4) Animals may not be kept in a lairage or pen for longer than 72 hours but in the case of calves and pigs for not longer than 48 hours.
 - (5) Sub regulation (4) does not apply in respect of Judas goats.
 - (6) Animals kept in lairages and pens for longer than 24 hours for monogastrics or longer than 48 hours for ruminants, must be fed.
 - (7) Unweaned pigs and calves under the age of three months and unweaned lambs under two months awaiting slaughter for a period of 12 hours or more, must be fed with grain, in the case of pigs, and milk or milk substitute in the case of calves, sheep and goat lambs.
 - (8) Where animals are fed in a lairage or pen, feed may only be placed in a hay rack, trough or other suitable container.
 - (9) The following animals may not be penned together:
 - (a) Bulls and cows or heifers and cows;
 - (b) calves and adults;
 - (c) animals of different species;

- (d) fractious and normal animals;
- (e) cattle with long and short horns.
- (10) Animals that gave birth in trucks or in lairages and their young must be kept in isolation pens and such animals may not be slaughtered within three days.

Herding

- 2.1.4 (1) Animals in lairages, pens, passages and crushes must be handled calmly and humanely, without hitting or shouting.
 - (2) Prodders must be battery operated and may be used only briefly and not when animals are already moving forward.

Emergency Slaughter

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

Isolation

2.1.6 Suspect animals must be isolated, in a separate area and a crush-pen must be provided for further examination by the OSV for approval prior to slaughter.

Code of Practice

2.1.7 These regulations apply in addition to any legal code of practice for the handling and transport of livestock.

2.2 ANTE MORTEM INSPECTION

- 2.2.1 (1) The OSV must do a comprehensive ante mortem inspection of all livestock presented for slaughter.
 - (2) A declaration of health (Health Attestation) and a certificate of origin must be provided for all animals slaughtered.
 - (3) An animal 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.
 - (4) There must be a standard procedure at an abattoir to convey the information acquired in the lairages to the Inspectors in the meat inspection area and a method of marking specific animals for the attention of the OSV should be in place.

Further inspections and findings

2.2.2 (1) (a) All animals that, in the opinion of the OSV doing ante mortem inspection, are not fit for slaughter must be isolated;

- (b) the OSV must decide whether such animals may be provisionally slaughtered or disposed of;
- (2) If the veterinarian decides that an animal mentioned in (1)(a) may be provisionally slaughtered, the carcass of such animal is subject to secondary meat inspection.
- (3) All animals presented for slaughter must be kept overnight unless the OSV authorises the slaughter of an animal on the day of arrival.
- (4) An animal 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;
 - (d) been eaten by it.
- (5) No person may slaughter an animal which is on the point of giving birth or which has given birth in transit or lairage.

Handling of dead animals

- 2.2.3 (1) All "dead on arrival" and "dead in pen" animals must be disposed of as condemned material in terms of the regulations.
 - (2) Prior to flaying or cutting up for disposal, or inspection of such animals, a blood smear to rule out the possibility of Anthrax is required.
 - (3) No dead or dying animal may be brought into or removed from the abattoir premises without the approval of the OSV.
 - (4) No carcass or part thereof that has been condemned may be brought into any part of the abattoir containing edible products.
 - (5) The OSV must do a post mortem examination on all DOAs or DIP. Where a controlled disease under the Animal Diseases Act, 1984 (Act No. 35 of 1984) is suspected the Regional State Veterinarian must be notified.
 - (6) The place and method of flaying dead animals for the purpose of regaining skins must be according to a protocol approved by the Provincial Executive Officer.

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 carcasses as required by the regulations under the Meat Safety Act 2000 (Act 40 of 2000).
- 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 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 Carcasses will be detained under the direct supervision of the Official State Veterinarian to be submitted to maturation at a temperature above +2° C for at least 24hours before the bones are removed.
 - The carcasses will only be released after the thermograph record has been evaluated and found within specifications.

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 (do own checks) 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) 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 Management Programs (HMPs) (also known as Pre-Requisite Programs (PRPs) 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 red 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/15/2003-05) and water (VPN/16/2003-05).

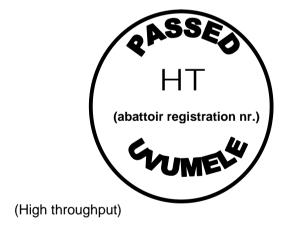
Microbiological monitoring of sanitation, personal hygiene, etc. - basic principles remain the same.

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.

PART V: MARKING, LABELLING 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, meat or animal products 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 the OSV;
 - (e) be secured by a OSV 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;
 - (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:



- (3) The stamps must contain
 - (a) the abattoir registration number;
 - (b) the wording shown in sub regulation (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 sub-regulation (2)(a);
- (5) the letters on the stamps must be readable and may not be smaller than 8 mm in 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 PCA.
- (7) The methyl violet ink used where stamps are applied to carcasses or edible products must be approved for use on foodstuffs.
- (8) The marks must be placed, in case of -
 - (a) cattle, sheep, pig, horse carcasses on each quarter of the carcass and for pigs an additional stamp on the head;
 - (b) cattle, calves and horses, on the heads, if skins are removed.

Roller-marking

8.2 In addition to point 1, the owner may use a method of roller marking on red meat carcasses, where such marking contains the words and number stated in above provided that such roller mark may only be used at abattoirs where meat classification is done.

Wrapping, packing and labelling

- 8.3 (1) All labels used on carcasses and meat must
 - (a) be printed on food grade paper or plastic printing material:
 - (b) include the information required by the regulations 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 and 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:
- (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.

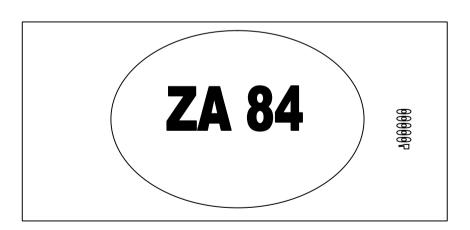
General

- 8.4 (1) 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 under the supervision of the OSV.
 - (2) The OSV 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

- 8.5 (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 VPN/11/2003-09).

PART V: OTHER VETERINARY PROCEDURAL NOTICES APPLICABLE FOR THE EXPORT OF RED MEAT (MUTTON)

9. Other Veterinary Procedural Notices Applicable for the export of red meat (Mutton)

9.1	VPN/01	Procedures to register an establishment.
9.2	VPN/02(a)	Standard for the registration of sheep farm for export status.
9.3	VPN/02(b)	Standard for the registration of cattle farm for export status.
9.4	VPN/15	Standard for microbiological monitoring of meat.
9.5	VPN/16	Standard for microbiological monitoring of water.
9.6	VPN/17	Principles of Certification
9.7	VPN/18	Law enforcement at export establishments.
9.8	VPN/19	Standard relating to the National Residue monitoring programme