
	<p><b>DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES</b></p> <p><b>DIRECTORATE: ANIMAL HEALTH</b></p>
	<p><b>VETERINARY PROCEDURAL NOTICE:</b></p> <p><b>For Manufacturers of Poultry Feed to Obtain Exemption in terms of the Animal Diseases Act, 1984 (Act No. 35 of 1984) to include Bovine Blood Meal in Poultry Feed</b></p>
<p><b>VERSION</b></p>	<p><b>VPN/34/2018/01</b></p>
<p><b>APPROVED BY:</b></p>	<p></p> <hr/> <p><b>Dr Mpho Maja</b> <b>Director: Animal Health</b></p>
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**LEGISLATIVE MANDATE**

**Animal Diseases Act, 1984 (Act No. 35 of 1984)**

**Animal Diseases Regulations (R.2026 of 1986)**

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## ACRONYMS

<b>BSE</b>	Bovine Spongiform Encephalopathy
<b>DAFF</b>	Department of Agriculture, Forestry and Fisheries
<b>D:AH</b>	Director: Animal Health
<b>OIE</b>	World Organisation for Animal Health
<b>PEO</b>	Provincial Executive Officer
<b>PSV</b>	Provincial State Veterinarian
<b>SOP</b>	Standard Operating Procedure
<b>VPN</b>	Veterinary Procedural Notice

## PART I

### 1. PURPOSE AND SCOPE

The main objective of the guidelines is to provide for a procedure for manufacturers of poultry feed to obtain the relevant exemptions under section 24 of the Animal Diseases Act, 1984 (Act No. 35 of 1984) to include bovine blood meal in the registered feed.

Section 24 Restrictions on the Disposal of Certain Things states:

*(1) No person shall - e) feed any protein of ruminant origin (except milk and milk products) to any animals other than predators and carnivores, except with the written approval of the director. Any written approval for the above-mentioned exemption may only be granted for the feeding of ruminant blood meal to non-ruminant animals and is subject to the conditions as may be determined by the director. [Para. (e) added by R.443 of 25 May 2001 and substituted by R.543 of 6 July 2007, by R.1059 of 13 November 2009 and by R.564 of 23 June 2010]*

The use of blood meal by dedicated feed manufacturing facilities is also regulated in terms of the Government Notice No. 356 of 29 April 2011 (2) c. The Registrar of Act 36 of 1947 may allow the registration of poultry feed containing bovine blood meal, provided an exemption is granted by the Director: Animal Health. This exemption will be considered based on compliance of the applicant (feed manufacturer) and relevant suppliers of bovine blood (abattoir) and bovine blood meal (sterilising [rendering] plant) to the specifications of this VPN.

These guidelines are drafted for the purposes of:

1. Providing evidence that the bovine blood products distributed for poultry feeds are not posing any risk of introducing harmful pathogens (in particular BSE prions) into the feed and food chain;
2. Providing for independent inspection and auditing mechanisms, as authorized by the Director: Animal Health (D:AH) and providing easy access to data in the event of an audit being carried out by an inspection team from an independent authorised auditor, the Department of Agriculture, Forestry and Fisheries (DAFF) or from overseas (e.g. European Commission) delegations;
3. Supplying evidence through collected data and supporting documents to ensure that adequate procedural control systems are in place in order to confirm compliance with this VPN;

4. Providing evidence that the raw material (bovine blood) was collected, stored and transported in an acceptable manner to prevent contamination with specified risk material;
5. Providing evidence that all efforts were made to prevent contamination, during processing, storage and transport of the bovine blood meal and finished product;
6. Providing evidence that the final product (bovine blood meal) is distributed only for the feeding of poultry;
7. Providing a documented system of traceability of bovine blood, through the processing thereof into bovine blood meal and final inclusion in poultry feeds and to confirm compliance with the traceability system.

#### **SCOPE**

- Animal Diseases Act, 1984 (Act No.35 of 1984)
- Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No.36 of 1947)
- Meat Safety Act, 2000 (Act No.40 of 2000)
- Red meat Regulations No. 1072, 17 September 2004
- Regulations relating to farm feeds No. 1087, 3 November 2006
- Regulations relating to sterilizing plants No. 1086, 3 November 2006

#### **Other Documentation**

- OIE: Terrestrial Animal Health Code 2017
- OIE Manual of Diagnostic Test and Vaccines for Terrestrial Animals 2016

## **PART II**

### **2. ROLE PLAYERS AND RESPONSIBILITIES**

#### **2.1 Feed manufacturer (applicant)**

- a) The applicant for exemption is the feed manufacturer who will also apply for the registration of the final feed product. The feed manufacturer shall indicate all relevant facilities that it intends to source the raw blood (abattoir) and blood meal (sterilising (rendering) plant) from.
- b) The applicant must identify and inform an authorised auditor of the intention to submit an application of exemption under section 24 of the Animal Diseases Act, 1984 (Act No. 35 of 1984) to the Director: Animal Health (DAH). The applicant is responsible for signing a contract with the identified authorised auditor for the subsequent audits required for exemption under section 24 of the Animal Diseases Act, 1984 (Act No. 35 of 1984).
- c) The applicant is responsible for contacting the local Provincial State Veterinarian (PSV) to arrange for an inspection for BM approval (referring to Part III of this document) of the feed manufacturing plant.

#### **2.2 Abattoir**

- a) The abattoir management is responsible for contacting the local PSV to arrange for an inspection for BM approval (referring to Part III of this document) of the abattoir facility.
- b) The abattoir management is responsible for signing a contract with the identified authorised auditor for the subsequent audits required for exemption under section 24 of the Animal Diseases Act, 1984 (Act No. 35 of 1984).

#### **2.3 Sterilising (rendering) plant**

- a) The sterilising (rendering) plant management is responsible for contacting the local PSV to arrange for an inspection for BM approval (referring to Part III of this document) of the sterilising (rendering) plant facility.
- b) The sterilising (rendering) plant management is responsible for signing a contract with the identified authorised auditor for the subsequent audits required for exemption under section 24 of the Animal Diseases Act, 1984 (Act No. 35 of 1984).

#### **2.4 Authorised auditor**

- a) An accredited auditor may apply to the D:AH for authorisation in terms of the Animal Diseases Act, 1984 (Act No 35 of 1984) for the purposes of this VPN.
- b) The D:AH shall authorise (in terms of Section 4(1) of the Animal Diseases Act, 1984 (Act No 35 of 1984)) an accredited auditor(s) to audit abattoirs, sterilising (rendering) plants and feed manufacturing facilities, in terms of this VPN, that have been identified by an applicant in its application for exemption to use bovine blood meal in poultry feeds.

- c) The auditor must be able to prove competence and demonstrate independence from all companies related to the inspection. The auditor must sign a declaration of independence together with a confidentiality agreement.
- d) The authorised auditor contacts the management of the nominated abattoir(s) and sterilising (rendering) plant(s) to confirm their intention of being approved for this purpose and provides them with the relevant forms to complete (which will include Annexure 4(b)).
- e) The abattoir(s), sterilising (rendering) plant(s) and feed manufacturing facilities related to an application for exemption shall be audited as a fully traceable supply chain to confirm compliance with this VPN.
- f) The complete supply chain related to an application for exemption requires auditing by the same authorised auditor for traceability and reconciliation purposes.
- g) Physical and paper trail/ document audits must be conducted to ensure compliance with this VPN.
- h) Monthly audit reports and reconciliation reports must be submitted to the D:AH initially.
- i) Copies of all audit and reconciliation reports shall be sent to the relevant responsible PSV(s) and the D:AH.

## **2.5 Provincial State Veterinary Services**

- a) The inspection for BM approval of an abattoir, sterilising (rendering) plant and feed manufacturing facility in terms of this VPN shall be performed by the relevant Provincial State Veterinarian (PSV) of the area in which the facility is located.
- b) The owners/ management of the abattoir(s), sterilising (rendering) plant(s) and feed manufacturing plant shall arrange with the relevant local PSV for inspection in order to BM approve the facilities in terms of VPN34. More than one PSV may be involved in this process depending on the locations of these facilities.
- c) Inspections for BM approval of an abattoir, sterilising (rendering) plant and feed manufacturing facility in terms of this VPN will be conducted annually and approval valid for 12 months from the date of inspection.
- d) The report(s) of the inspection conducted by the PSV(s) on the abattoir(s), sterilising (rendering) plant(s) and feed manufacturing plant shall be forwarded to the D:AH via the office of the relevant Provincial Director(s).

## **2.6 National Directorate Animal Health**

- a) The D:AH will issue a BM approval certificate to each compliant facility in the supply chain through the responsible PSV upon successful application through the relevant Provincial Director(s).
- b) The D:AH will issue a letter of exemption in terms of section 24 of the Animal Diseases Act, 1984 (Act No. 35 of 1984) to the applicant, based on the successful BM approval of all the relevant facilities together with an initial audit report of each facility from the identified authorised auditor. Continued validity of the exemption will depend on the receipt of monthly traceability/ reconciliation audit reports in terms of this VPN received from the authorised auditor.
- c) All applications to the D:AH related to this VPN should be sent via email to [AliciaC@daff.gov.za](mailto:AliciaC@daff.gov.za) and copied to [PetuniaM@daff.gov.za](mailto:PetuniaM@daff.gov.za).

## **PART III**

### **3. BM APPROVAL OF FACILITIES**

#### **3.1 Official veterinary inspections**

- 3.1.1 The owner/ management of each of the abattoir(s), sterilising (rendering) plant(s) and feed manufacturing facility indicated on the application form (Annex 4b), is required to arrange with the relevant local Provincial State Veterinarian (PSV) to inspect their facility for BM approval.
- 3.1.2 The owner of each facility and the PSV will agree upon a suitable date for the inspection. The PSV will inform the management of the facility of the conditions under which the inspection will be carried out.
- 3.1.3 The basis for recommendation will be the requirements as described in this VPN.
- 3.1.4 The PSV will be responsible for the following actions/procedures:
- a) Acquaint himself/herself with the minimum requirements of this VPN for approval of the facility in order to provide a safe product (blood/blood meal) for its inclusion in poultry feed. The PSV will not be required to audit/ submit reconciliation reports.
  - b) Inspect the abattoir(s), sterilising (rendering) plant(s) and/or feed manufacturing facility and complete inspection report(s) with appropriate comments, upon receipt of the properly completed application form.
  - c) For the initial BM approval inspection some traceability functions will not be active yet. These functions should however be evaluated to determine if they are theoretically possible for the facility pending implementation. For subsequent BM re-approval inspections, all traceability functions will be audited.
  - d) BM approval inspections by the PSV will not include the auditing of reconciliation reports and procedures, as these will be inspected by the authorised auditor responsible for the full supply chain audit. These sections may be marked as “not applicable” for the purpose of the BM approval inspection.
  - e) If the facility does not comply with the requirements of this VPN, the PSV must provide the owner of a facility with a detailed inspection report with the reasons why a facility cannot be approved.
  - f) If non-compliances have been identified, arrange for another inspection when the owner indicates that all the non-compliances have been rectified.
  - g) Approval will only be considered if an inspection and supervision service by the PSV is possible at the facility.
  - h) The PSV must keep the original application document on file, submit an inspection report to the facility and submit a copy of the inspection report to the Director: Animal Health (D:AH) via the office of the Provincial Director.
- 3.1.5 Upon successful application through the relevant Provincial Director(s), each compliant facility in the supply chain will receive a BM approval certificate from the D:AH through the responsible PSV:
- BM1 approval for abattoirs
  - BM2 approval for sterilising (rendering) plants

- BM3 approval for feed manufacturers

- 3.1.6 Facility BM approval certificates are only valid for a maximum of 12 months from the last date of inspection, where after the facility must re-apply through the responsible PSV. It is the responsibility of the owner/ management of the facility to request inspection for re-approval at least 3 months before the expiry date of the BM approval certificate. Re-application is also necessary where there has been a change in ownership, management or physical address of the facility. Renewed BM approval certificates for all facilities in the supply chain will be required for the annual re-application for exemption.
- 3.1.7 In cases where abattoirs and sterilising (rendering) plants are routinely inspected by the PSV, the annual BM registration inspection visits should ideally be combined to ease operations.

## **PART IV**

### **4. APPLICATION PROCESS FOR EXEMPTION**

#### **4.1 Authorised auditor inspections**

- 4.1.1 The identified authorised auditor must engage with the owners/ management of the abattoir(s), sterilising (rendering) plant(s) and feed manufacturing facility indicated on the application form (Annex 4(b)) to arrange for inspections of these facilities.
- 4.1.2 The owner of each facility and the authorised auditor will agree upon a suitable date for the inspection. The authorised auditor will inform the owner of the facility of the conditions under which the inspection will be carried out.
- 4.1.3 The basis for recommendation for exemption will be the requirements as described in this VPN.
- 4.1.4 The authorised auditor will be responsible for the following actions/procedures:
  - a) Acquaint himself/herself with the minimum requirements of this VPN for approval of the facility in order to provide safe products (blood/blood meal) for its inclusion in poultry feed.
  - b) Upon receipt of the properly completed application form, inspect the abattoir(s), sterilising (rendering) plant(s) and feed manufacturing facility within the supply chain and complete inspection report(s) with appropriate comments.
  - c) For the initial facility audits some traceability and reconciliation functions will not be active yet. These functions should however be evaluated to determine if they are theoretically possible for each facility for pending implementation. For all subsequent audits, all traceability functions will be audited and reconciliation reports provided.
  - d) If during an inspection a facility does not comply with the requirements of this VPN, the authorised auditor must provide the owner of a facility with a detailed inspection report with the reasons why a facility cannot be recommended. The responsible PSV and the Director Animal Health (D:AH) shall be notified immediately of any non-compliances.
  - e) Recommendation for exemption will only be considered if all procedures, SOP's and operations are in place to ensure full traceability.
  - f) The complete supply chain related to an application for exemption requires auditing by the same authorised auditor for traceability and reconciliation purposes.
  - g) The authorised auditor must submit a copy of the inspection report(s) to the responsible PSV(s) and the D:AH.
- 4.1.5 If exemption is granted under section 24 of the Animal Diseases Act, 1984 (Act No. 35 of 1984) by the D:AH, all subsequent monthly audit reports shall include full reconciliation reports to confirm traceability of the supply chain.
- 4.1.6 All monthly reports shall be submitted to the responsible PSV(s) and the D:AH within 30 days of the end of the audited month. The frequency of physical auditing will be reviewed after a period of six months. Monthly reconciliation reports will remain a requirement.

## **4.2 Application and renewal for exemption**

**4.2.1** The documents listed below must be presented to the D:AH on the application for exemption:

- a) Annexure 4(b) - Application form, completed and signed by the applicant, all participating sterilising (rendering) plant(s) and abattoir(s) facilities, as well as the authorised auditor.
- b) BM approval certificates for the abattoir(s), sterilising (rendering) plant(s) and feed manufacturing facility constituting the supply chain.
- c) Initial audit reports completed by the identified authorised auditor for participating abattoir(s), sterilising (rendering) plant(s) and feed manufacturing facility within the supply chain.

**4.2.2** The completed application must be sent to the D:AH in order for the applicant to be considered for a written exemption.

**4.2.3** If the application is successful, the D:AH will, through written correspondence, grant an exemption based on the BM approvals of the facilities and the audit reports of the authorised auditor. The written exemption shall be supplied to the feed manufacturer (applicant) and a copy supplied to the authorised auditor.

**4.2.4** If written exemption is granted, the applicant must present the written proof to the Registrar of Act 36, on application for registration of poultry feed containing bovine blood meal.

**4.2.5** The written exemption is valid for 12 months from the signified date. For renewal application the auditor must re-submit the following documents:

- a) Annexure 4(b) - Application form, completed and signed by the applicant, all participating sterilising (rendering) plant(s) and abattoir(s), as well as the authorised auditor.
- b) Renewed BM approval certificates for the abattoir(s), sterilising (rendering) plant(s) and feed manufacturing facility constituting the supply chain.
- c) Monthly audit and reconciliation reports completed by the authorised auditor.
- d) Registration certificate(s) of poultry feed(s) containing bovine blood meal registered under Act 36 of 1947.

**4.2.6** Change of supplier:

- a) If the source of bovine blood changes at any time, the feed manufacturer (applicant) needs to notify the authorised auditor so that the additional supplier may be audited for inclusion. The report of the inspection done by the PSV on the additional abattoir shall be forwarded to the D:AH via the office of the Provincial Director. Only once BM approval of the additional supplier is granted in terms of this VPN, may blood from that abattoir be sourced by the sterilising (rendering) plant(s).
- b) If the source of bovine blood meal changes at any time, the feed manufacturer (applicant) needs to notify the authorised auditor so that the additional supplier may be audited for inclusion. The report of the inspection done by the PSV on the sterilising (rendering) plant shall be forwarded to the D:AH via the office of the Provincial Director. Only once BM approval of the additional supplier is granted in terms of this VPN, may blood meal from that sterilising (rendering) plant be sourced by the feed manufacturing facility.

### **4.3 Revoking of exemption**

- 4.3.1 Re-applications for exemption must reach the office of the D:AH before the date of expiry of the exemption letter. Failing this, the exemption will no longer be valid.
- 4.3.2 Should any non-compliance to this VPN be detected by the authorised auditor at any stage, the D:AH must be notified. The authorised auditor must make recommendations to the facilities for corrective action and notify the D:AH once compliance has been restored.
- 4.3.3 Should significant facility non-compliance be detected, the authorised auditor may request re-inspection of the facility by the responsible PSV. Reports of re-inspection must be submitted to the D:AH for review of the facility's BM approval status.
- 4.3.4 Failure to take corrective action will result in the facility's BM approval being suspended. If the BM approval of any facility within the supply chain is suspended due to non-compliance, the exemption letter from the D:AH will be revoked.
- 4.3.5 The exemption letter can be revoked at any time without warning, at the discretion of the D:AH, if non-adherence to the requirements of this VPN is detected.

## PART V

### 5. REQUIREMENTS FOR TRACEABILITY

The following key issues and procedures form the basis for achieving compliance, and must be used during BM approval and traceability audits. The responsible persons for each activity shall be identified to ensure that the duties are carried out correctly and with full accountability.

#### 5.1 Abattoirs

Raw material (bovine blood) shall be sourced only from registered abattoirs that are officially registered in accordance with the Meat Safety Act (Act No 40 of 2000). BM approved abattoirs shall comply with all the requirements of the Meat Safety (Act No 40 of 2000) and the Red Meat Regulations.

Only bovine blood is covered in this VPN and multi-species abattoirs must ensure separate slaughter of species to ensure that only bovine blood is collected for further processing.

All cattle utilized for this process must be accompanied by a health certificate and must pass an ante-mortem inspection, i.e. are fit for slaughter.

##### 5.1.1 Processing and production

###### a) Stunning Method

Blood and blood by-products intended for the manufacturing of poultry feed must be derived from bovines that were not subjected to a stunning process prior to slaughter that either involves a device injecting compressed air or gas into the cranial cavity, or a pithing process.

Confirmatory evidence (i.e. visualisation of the performed procedure) pertaining to the stunning method is required during an inspection.

Care should be taken to prevent the spillage of any central nervous system tissue into the bleeding trough or blood tank.

###### b) Blood Collection

After stunning, the blood vessels (including oesophagus and trachea) are severed from ear to ear, but not the spinal cord.

Bleeding must take place in the dedicated bleeding area only.

Blood is collected in a dedicated trough, and accumulated in a dedicated tank. The tank(s) must be clearly identified. Only blood from the bleeding area may be stored in these tanks for use.

Drainage from the cleaning of the blood collection trough may not drain into the dedicated blood collection tank.

Blood in the slaughter area may not be directly or indirectly drained into the bleeding trough or blood holding tank and any contamination of collected blood must be avoided.

Immediately after collection the blood is removed from the collection area to a processing/storage area. No other tissues may be handled in this area.

Blood which is kept at ambient temperature in the storage area must be delivered at least daily to the rendering plant.

Blood may be coagulated before transported to rendering plant.

#### **5.1.2 Placing on the market of bovine blood**

Bovine blood (raw or coagulated) may only be sold to sterilising (rendering) plants that are registered under Act 36 of 1947 for further processing. Proof of the sterilising (rendering) plant registration certificate is required.

Proof of an order to and delivery from the abattoir is required for compliance.

A Delivery Note/Movement Permit must be signed off by the abattoir inspector and accompany the consignment to the rendering plant. A master movement permit with a logbook may be used for this purpose.

#### **5.1.3 Transport to sterilising (rendering) plant**

On-site: In case of a rendering facility located at the same premises as the abattoir, the blood is pneumatically conveyed or pumped into the processing system of the rendering facility.

Off-site: In case of a rendering facility NOT located at the same premises as the abattoir, the blood needs to be transported to the rendering plant with a sealed, leak-proof vehicle at ambient temperature upon completion of the slaughter session. A movement permit will be required to remove blood from the abattoir and the delivery truck should be sealed. This permit is required in terms of the Meat Safety Act (Act No 40 of 2000).

The container (tank) to be transported must be clearly marked for identification and be used for this purpose only.

#### **5.1.4 Record keeping**

All documents shall have sequential numbering to allow documentary evidence to be linked in order to establish full traceability.

All documents shall be kept for a minimum period of 8 years.

The following records should be maintained by the Abattoir when selling raw or coagulated blood of bovine origin to registered sterilising (rendering) plants for processing into bovine blood meal.

The records must be presented during an audit and illustrate the proper recording and numbering of all received and slaughtered cattle, including their place of origin so that each carcass can be traced back to the farm of origin if required.

##### **a) Records of processing and production (Annexure 1a):**

- Registration certificate(s) of the abattoir (S-number & BM-number)
- A recording system whereby the carcasses can be traced back to the farm of origin

- A declaration of health and origin must be provided for all cattle by the owner of the slaughter stock and recorded by the abattoir owner
- Slaughter numbers per day to confirm the volume of bovine blood collected per day
- Volume of bovine blood dispatched from abattoir to the rendering facility,
- Verification that only bovine blood from bleeding area (volume) are stored in a designated tank for delivery to a rendering plant, and tank identification must be visible on production and sales records
- Movement permits for all bovine blood removed from the abattoir for delivery to a registered rendering plant

**b) Records of sales and transport (Annexure 1b):**

The sales records shall capture the following information:

- Details of purchaser (name, physical address, contact details, purpose of use)
- Details of product (type of product i.e. raw/coagulated/bovine blood, origin of product, quantities ordered & date)
- Details of delivery (quantity delivered & date, address delivered to – delivery note)
- Details of transport (vehicle identification – type & number, tank identification to be delivered)

**5.1.5 Non-conforming products**

Non-conforming products are defined as material that cannot be directly included in the final blood product, but can be reworked for a different product or disposed of as condemned material (e.g. blood visibly contaminated with brain material).

- Isolation and segregation procedure for non-conforming product is in place, including who is responsible for monitoring product for non-conformances. This should also consider the containers used for storage and the cleaning thereof.
- Non-conforming product is clearly identifiable and segregated with no threat of being re-introduced / re-used.
- Records are available of non-conforming product and the disposal thereof.

**5.1.6 Third party haulers**

An SOP shall be available for the contracting of third party haulers to ensure that operations are aligned with the requirements of transport to sterilising (rendering) plant(s).

- A valid contract must be in place and should stipulate all relevant requirements.
- Requirements for 3rd party hauling to be communicated to the transporter, i.e. dedicated sealed truck must be used for single deliveries and washed after delivery.
- Problems and non-conformances to be communicated to & by the transporters and corrective actions taken.
- 3rd party transporters to be included in the normal plant transport inspections with regard to stipulated requirements.

#### **5.1.7 Documented procedures**

The following standard operating procedures (SOP) for the handling and processing of blood of bovine origin at the abattoir must be approved by the PEO then documented and implemented:

- SOP that includes a recording system at the abattoir to ensure that the supplier of blood (origin) and purchaser is identified and traceable in the event of a recall;
- SOP that includes the prevention of cross contamination during stunning and blood collection, at receiving, processing, storage and dispatch of bovine blood.
- SOP that includes the cleaning of equipment and trucks used in the processing and transport of coagulated bovine blood to prevent cross contamination.
- SOP that includes the handling and fate of non-conforming products.
- SOP that includes the contracting of third party haulers.
- Schematic plans and flow diagrams of the abattoir illustrating the dedicated process from bleeding area to storage tank so that no cross contamination could occur.

#### **5.1.8 Reconciliation**

Reconciliation is required to audit that the number of cattle slaughtered equates to the amount of raw or coagulated bovine blood transported to the sterilising (rendering) plant(s). The facility shall have a formula available for the determination of reconciled amounts that are to be expected.

A record of general trends should be established by the authorised auditor over time to enable the detection of abnormal fluctuations within the equation.

## **5.2 Sterilising (rendering) plant**

Bovine blood shall only be sourced from abattoirs that comply with the requirements of Part III, point 1 of this document. Approved rendering plants shall be dedicated facilities and shall comply with all the requirements of this VPN.

### **5.2.1 Processing and production**

The process for rendering of blood shall be approved by the Registrar of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (Act No 36 of 1947) and its Regulations.

The final product (bovine blood meal collected as per VPN34) shall be registered and approved in terms of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (Act No 36 of 1947) and its Regulations.

The rendering facility may not co-process, store or utilize specified risk material (as defined in the latest version of the OIE Terrestrial Animal Health Code).

#### **a) Equipment and control**

The structures, equipment, recording devices, procedures, control measures etc. installed and implemented at the rendering plant, shall allow for the safe and efficient production of bovine blood meal, and shall prevent the cross flow and contamination of the final product. A dedicated line of production is required.

#### **b) Storage & labelling**

The bovine blood meal shall be bagged and stored in a controlled area to avoid contamination and spoilage. Packaging/bagging must be new.

The bagged product shall be labeled according to the requirements of the Regulation for Farm Feeds and in accordance to the approved label authorised by Act 36 of 1947. A copy of the approved label must be available on site for auditing purposes. The label must clearly state that the product is not fit for ruminant consumption.

#### **c) Sampling**

Representative samples of the bovine blood meal shall be taken and subjected to light microscopy testing for bone spicules of ruminant (bovine) origin with negative results to demonstrate regulatory compliance and effective procedures.

The frequency of sampling should be risk based. Initially, weekly testing of composite samples will be required and thereafter the testing frequency may be modified based on accumulated results.

The testing method prescribed will be according to the Commission Regulation (EU) No 51/2013 of 16 January 2013. Routine testing will be conducted at a DAFF approved laboratory.

### **5.2.2 Placing on the market of bovine blood meal**

Bovine blood meal shall only be supplied to feed manufacturers of poultry feeds that have been registered in terms of this VPN.

### **5.2.3 Transport to feed manufacturing facility**

Transport of bovine blood meal to the feed manufacturer shall be on sealed trucks, dedicated for this purpose.

#### 5.2.4 Record keeping

All documents shall be kept for a minimum period of 8 years.

The records must be presented during an audit and illustrate compliance to the requirements of this VPN so as to ensure complete traceability and reconciliation of bovine blood received from an abattoir (origin), through the safe and efficient processing thereof into blood meal at the rendering plant and the final delivery of registered bovine blood meal to a dedicated monogastric feed manufacturing facility.

The following records should be maintained by the Rendering plant when selling bovine blood meal to animal feed manufacturers for inclusion into poultry feeds.

a) Records of acquisition (Annexure 2a):

The acquisition records shall capture the following information:

- Supplier details (name, physical address, abattoir registration no., contact details)
- Product details (description of product, origin of product)
- Delivery details (order no., quantity ordered, quantity delivered, transporter details, vehicle details, container details, delivery date)
- A qualified person from the rendering plant shall sign off (and comment if applicable) on the delivery of bovine blood from an approved abattoir.
- Copy of movement permits for all bovine blood removed from the abattoir.

b) Records of production and storage (Annexure 2b):

- Quality control records from processing shall verify compliance to regulatory requirements in terms of Act 36 of 1947 (requirements relating to the registration of rendering plants).
- Quality control records from the final product (bovine blood meal) shall verify compliance to regulatory requirements in terms of Act 36 of 1947 (requirements relating to the registration of farm feed - nutrient specifications and undesirable substances).
- The production records shall capture the following information:
  - Name of rendering plant
  - Registration number (S-number) of approved facility
  - Date of manufacture
  - Batch number
  - Description of raw material (blood) used
  - Source of blood (bin / tank number)
  - Quantity of raw material (blood) used
  - Quantity of final product (blood meal)
  - Packaging details
  - Storage details for consignment of bovine blood meal

c) Records of sales and transport (Annexure 2c):

The sales records shall capture the following information:

- Details of purchaser (name, physical address, contact details, purpose of use)
- Details of product (type of product, batch number, origin of product (bagged or transported from which bin/container/line/storage), quantities ordered & date)

- Details of delivery (quantity delivered & date, address delivered to -- delivery note)
  - Details of transport (transporter identification, vehicle identification)
- d) Records of product returns  
Records must be kept of products returned, the reason for the return and the fate of the returned product.

#### 5.2.5 Non-conforming products

Non-conforming products are defined as material that cannot be directly included in the final blood meal product, but can be reworked for a different product or disposed of as condemned material.

- Isolation and segregation procedure for non-conforming product is in place, including who is responsible for monitoring product for non-conformances. This should also consider the containers/ packaging used for storage and the cleaning/ disposal thereof.
- Non-conforming product is clearly identifiable and segregated with no threat of being re-introduced / re-used.
- Records are available of non-conforming product and the disposal thereof.

#### 5.2.6 Third party haulers

An SOP shall be available for the contracting of third party haulers to ensure that operations are aligned with the requirements of transport to the feed manufacturing facility.

- A valid contract must be in place and should stipulate all relevant requirements.
- Requirements for 3rd party hauling to be communicated to the transporter, i.e. dedicated sealed truck must be used for single deliveries and washed after delivery.
- Problems and non-conformances to be communicated to & by the transporters and corrective actions taken.
- 3rd party transporters to be included in the normal plant transport inspections with regard to stipulated requirements.

#### 5.2.7 Documented procedures

The following standard operating procedures (SOP) for the handling and processing of blood of bovine origin at the rendering plant must be documented and implemented:

- SOP that includes a recording system at the rendering plant to ensure that the supplier of bovine blood (origin) and purchaser is identified and traceable in the event of a recall;
- SOP that includes the prevention of cross contamination at receiving, processing, storage and dispatch of bovine blood meal.
- SOP that includes the handling of reworked bovine blood products so as to fulfil its dedicated purpose and prevention of cross contamination with other blood products destined for the complete market.
- An SOP that includes the representative sampling for light microscopy testing for bone spicules of ruminant (bovine) origin in blood meal.

- SOP that includes the handling of returned and/or waste products to ensure that it does not enter the ruminant food chain and that it is disposed of in an appropriate manner.
- SOP that includes the cleaning of equipment and trucks used in the processing and transport of bovine blood meal to prevent cross contamination.
- SOP that includes the handling and fate of non-conforming products.
- SOP that includes the contracting of third party haulers.
- Schematic plans and flow diagrams of the rendering plant, illustrating the dedicated process from receiving to dispatch so that no cross contamination could occur.

#### 5.2.8 **Reconciliation**

Reconciliation is required to audit that the amount of raw or coagulated bovine blood received from the abattoir(s) equates to the amount of bovine blood meal transported to the feed manufacturing facility.

The facility shall have a formula available for the determination of reconciled amounts that are to be expected.

A record of general trends should be established by the authorised auditor over time to enable the detection of abnormal fluctuations within the equation.

### 5.3 Feed manufacturing facility

Bovine blood meal shall be sourced only from sterilising (rendering) plants that have been approved in terms of this VPN. The bovine blood meal sourced from such facilities must be officially registered in accordance with the Fertilizer, Farm Feed, Stock Remedy and Agricultural Remedies Act (Act No 36 of 1947) and its Regulations. Bovine blood meal shall only be used in the manufacturing of poultry feeds. Only feed manufacturing facilities dedicated to the manufacturing of poultry feeds may apply for exemption to use bovine blood meal. The use of bovine blood meal by these dedicated facilities is regulated in terms of the Government Notice No. R356 of 29 April 2011 and shall be granted by the Registrar of Act 36 of 1947 based on compliance of the applicant (feed manufacturer) and relevant suppliers of blood (abattoir) and blood meal (rendering plant) to the specifications of this VPN. Compliance will be indicated by the D:AH in the form of a letter of exemption in terms of section 24 of the Animal Diseases Act, 1984 (Act No. 35 of 1984).

Poultry feed manufactured at these facilities and containing bovine blood meal, shall comply with all the requirements of Act 36 of 1947 and the Regulations relating to farm feeds.

#### 5.3.1 Processing and production

a) Equipment and control:

The structures, equipment, recording devices, procedures, control measures etc. installed and implemented at the feed manufacturing facility, shall allow for the safe and efficient production of animal feed.

b) Storage and labeling:

Bagged feed: The poultry feed (containing bovine blood meal) shall be bagged in new bags and stored in a controlled area to avoid contamination and spoilage.  
Bulk feed: The poultry feed (containing bovine blood meal) shall be out loaded into a dedicated bulk tanker and compartments.

The bagged product shall be labeled according to the requirements of the Regulations for farm feeds and in accordance to the approved label authorised by Act 36 of 1947. A copy of the approved label must be available on site for auditing purposes. The label must clearly state that the product should not be fed to ruminants.

For bulk feed deliveries, the approved label (and all required information as stated above) must be attached to the invoice and delivery note of the bulk feed, and delivered with the feed to the client.

#### 5.3.2 Placing on the market of final product (poultry feed)

- a) The final product (poultry feed) shall be registered and approved in terms of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (Act No 36 of 1947), or be fully compliant with Regulation 15 "Requirements for Custom Mixes" of Act 36 of 1947.
- b) Samples of each batch of feed produced must be stored and available to the authorised auditor should random testing be requested. The cost of testing will be the responsibility of the feed manufacturer.

### **5.3.3 Transport of final product to producers**

Dedicated tankers for bulk delivery. Tankers cleaned after each delivery.

### **5.3.4 Record keeping**

All documents shall have sequential numbering to allow documentary evidence to be linked in order to establish full traceability.

All documents shall be kept for a minimum period of 8 years.

The following records should be maintained by the Feed Manufacturer when using bovine blood meal in the manufacture of animal feed for poultry:

a) **Records of acquisition/purchase (Annexure 3a):**

The acquisition records shall capture the following information:

- Raw material (bovine blood meal) registration certificate (Act 36 of 1947)
- Supplier details (name, physical address, rendering plant registration number, contact details)
- Product details (description of product, origin of product (incl. species))
- Delivery details (order number, quantity ordered, quantity delivered, transporter details, vehicle details, container/compartment details, delivery date)
- A qualified person from the feed mill (Quality Control officer) shall sign off on the delivery of bovine blood meal from a registered rendering plant and verify acceptable product quality delivered
- Identification of bin/storage where blood meal will be kept

b) **Records of production and storage (Annexure 3b):**

The production records shall capture the following information:

- Date of manufacturing feeds with bovine blood meal
- Quantity of feed manufactured and inclusion levels of bovine blood meal
- Batch number of feed manufactured
- Name (& type) of feed manufactured
- Identification of bin where blood meal is stored and used from in the formulation
- Identification of bin where final product (poultry feed) is stored before out loading / bagging
- Packaging details (bulk)

c) **Records of sales and transport (Annexures 3c and 3d):**

The sales records shall capture the following information:

- For registered feed: Registration certificate of final product (poultry feed) from Act 36 of 1947.
- For custom mixes: Proof of custom mix request (signed form) from client for inclusion of bovine blood meal and documented proof of compliance with the procedures related to the handling of custom mixes as regulated under Act 36 of 1947 (Regulation 15).

- Details of client (name, physical address, contact details, purpose of use)
- A signed declaration from clients (poultry producers) purchasing feed containing bovine blood meal for specific use that ensures proper storage, handling and feeding methods so as to uphold the traceability of this VPN.
- Details of product (type of product, V-number, batch no., origin of product (bagged or transported from which bin/container/line/storage), quantities ordered & date)
- Details of delivery (quantity delivered & date, address delivered to – delivery note)
- Details of transport (transporter identification, vehicle and compartment identification)

d) Records of Feed returns

Records must be kept of products returned, the reason for the return and the fate of the returned product.

### 5.3.5 Non-conforming products

Non-conforming products are defined as material that cannot be directly included in the final dedicated feed product, but can be reworked for a different product or disposed of as condemned material.

- Isolation and segregation procedure for non-conforming product is in place. This should also consider the containers/ packaging used for storage and the cleaning/ disposal thereof.
- Non-conforming product is clearly identifiable and segregated with no threat of being re-introduced / re-used, if not suitable for re-work.
- Records are available of non-conforming product and the disposal thereof.

### 5.3.6 Third party haulers

An SOP shall be available for the contracting of third party haulers to ensure that operations are aligned with the requirements of transport to the feed manufacturer's clients.

- A valid contract must be in place and should stipulate all relevant requirements.
- Requirements for 3rd party hauling to be communicated to the transporter, i.e. dedicated sealed truck must be used for single deliveries and washed after delivery.
- Problems and non-conformances to be communicated to & by the transporters and corrective actions taken.
- 3rd party transporters to be included in the normal plant transport inspections with regard to stipulated requirements.

### 5.3.7 Documented procedures

The following standard operating procedures (SOP) for the handling and processing of blood meal of bovine origin at the feed mill must be documented and implemented:

- SOP for a recording system at the feed mill to ensure that the supplier of bovine blood meal (rendering plant) and purchaser is identified and traceable in the event of a recall;

- SOP for the handling of reworked poultry feed (with bovine blood meal) so as to fulfil its dedicated purpose and prevention of cross contamination with other poultry feeds not containing blood meal.
- SOP for the disposal of returned feed products to ensure that it does not enter the ruminant food chain and that it is re-worked or disposed of in an appropriate manner.
- SOP for the handling and fate of non-conforming products for either re-work or as condemned material/ waste.
- SOP that includes the handling of feed waste and other relevant waste products (e.g. bovine blood meal storage bags).
- SOP for the contracting of third party haulers.
- Schematic plans and flow diagrams of the feed mill, illustrating the dedicated process from receiving to dispatch so that no cross contamination could occur.

#### 5.3.8 Reconciliation

Reconciliation is required to audit that the amount of bovine blood meal received from the sterilising (rendering) plant(s) equates to the amount included in the dedicated poultry feed mix produced.

The facility shall have a feed formula available for the determination of amounts of bovine blood meal used in the feed to show reconciliation.

A record of general trends should be established by the authorised auditor over time to enable the detection of abnormal fluctuations.

**ANNEXURE 1(a)**

[illegible]

**E-mail address of Hygiene Manager:**

**TOTAL**

**ABATTOIR RAW BLOOD SALES AND TRANSPORT CONTROL SHEET**

**Name of Abattoir:**

**Name of Rendering facility:**

**Destination of untreated blood:**

Physical Address:

**Name & Contact details of owner/Manager -  
of Rendering Facility:**

E-mail address of owner/Manager:

**MONTH:**

[illegible]

**STERILISING PLANT RAW BLOOD ACQUISITION RECORDS**

MONTH

**Sterilising Plant:**

**Expiration date:**

Postal Address:

Name of Contact Person:

**E-mail address:**

[illegible]

**ANNEXURE 2 (b)**

# STERILISING PLANT BLOOD MEAL PRODUCTION RECORDS

## Sterilising Plant

**Name of the Sterilising Plant:**

**Registration No.:**

**Expiration date:**

Physical Address:

**Postal Address:**

Telephone &amp; Fax No.:

Name of Contact Person:

E-mail address:

**MONTH:**

[illegible]

**STERILISING PLANT BLOOD MEAL SALES AND TRANSPORT RECORDS**

Name of the Sterilising Plant:

**Registration No.:**

**Expiration date:**

V-Number of product:

Physical Address:

**Postal Address:**

Telephone &amp; Fax No.:

Name of Contact Person:

**E-mail address:**

[illegible]

# **ANIMAL FEEDS MANUFACTURER BLOOD MEAL USAGE RECORD FORMS**

MONTH

E-mail address:

[illegible]

# ANIMAL FEEDS PRODUCTION RECORD

## Feeds Manufacturing Plant

Name of the Feeds Plant:

Registration No.:

**Expiration date:**

Physical Address:

**Postal Address:**

Telephone &amp; Fax No.:

Name of Contact Person:

**E-mail address:**

**Production Records**

[illegible]

## ANNEXURE 3 (c)

# ANIMAL FEEDS SALES RECORD

## Feeds Manufacturing Plant

Name of the Feeds Plant:

Registration No.:

**Expiration date:**

**Registration of final product:**

Physical Address:

**Postal Address:**

Telephone &amp; Fax No.:

**Name of Contact Person:**

E-mail address:

## Sales Records

[illegible]

## ANIMAL FEEDS DISPATCH RECORDS

MONTH

**Name of the Feeds Plant:**

**Expiration date:**

**Postal Address:**

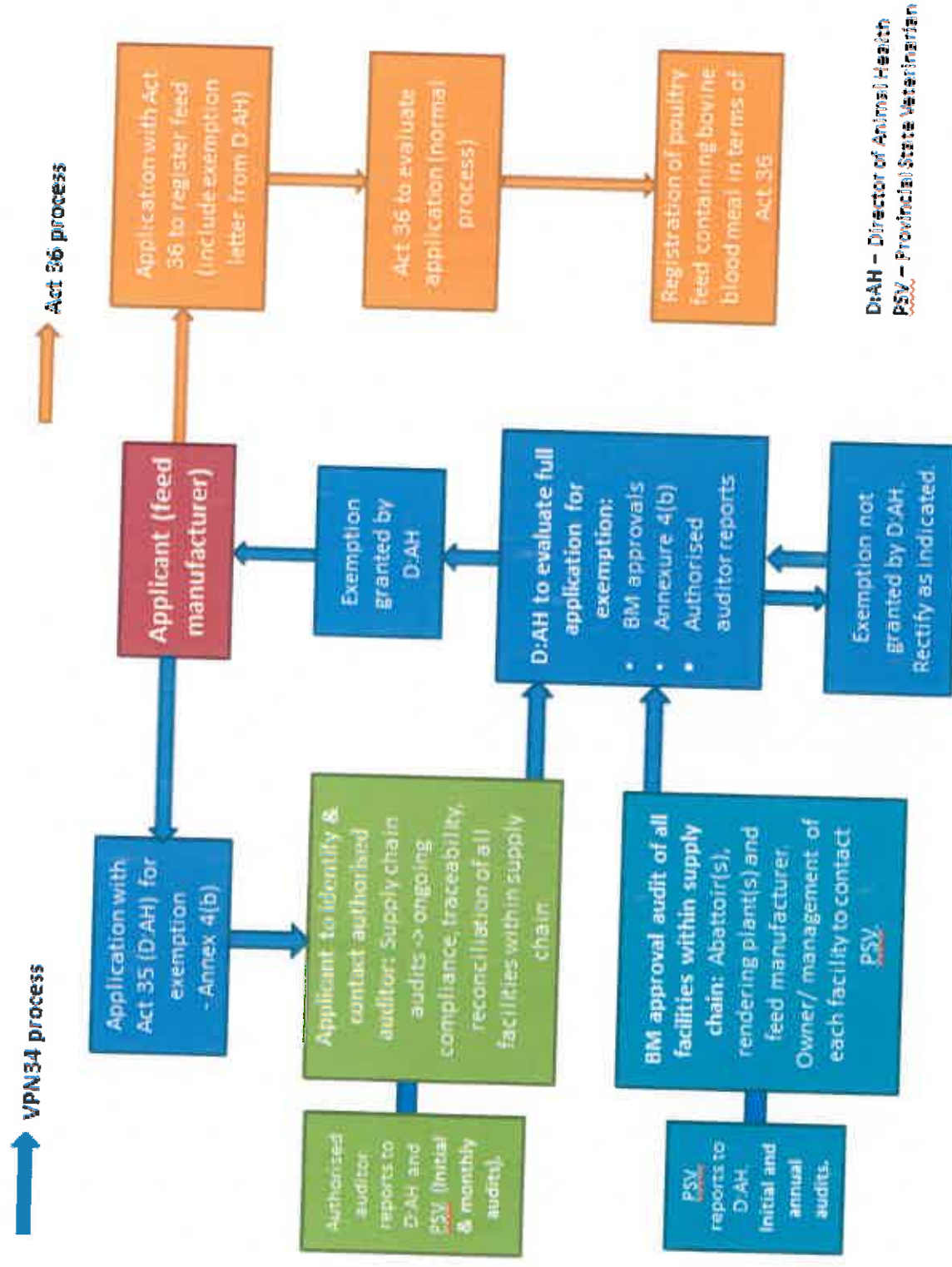
**Name of Contact Person:**

**E-mail address:**

## Dispatch Records

[illegible]

## ANNEXURE 4 (a)



D:AH – Director of Animal Health  
PSV – Provincial State Veterinarian



**agriculture,  
forestry & fisheries**

Department:  
Agriculture, Forestry and Fisheries  
REPUBLIC OF SOUTH AFRICA

**ANNEX 4(b) (VPN/34/2018/01)  
APPLICATION FOR EXEMPTION: .....**

Reference no

**A. GENERAL INFORMATION OF THE APPLICANT (FEED MANUFACTURER)**

DATE OF APPLICATION	
NAME OF FACILITY	
APPROVAL NUMBER (BM3- no.) (in terms of Act 35)	
REGISTRATION NUMBER OF FEED (for re-application)	
PHYSICAL ADDRESS	
POSTAL ADDRESS	
POSTAL CODE	
TOWN	
PROVINCE	
TELEPHONE NUMBER	
FAX NUMBER	
NAME OF THE MANAGER / OWNER	
E-MAIL ADDRESS OF MANAGER / OWNER	
NAME OF AUTHORISED VETERINARIAN RESPONSIBLE FOR PRIMARY/ANNUAL VETERINARY INSPECTIONS FOR REGISTRATION OF FACILITY	
NAMES OF AUTHORISED INDEPENDENT AUDITING BODY RESPONSIBLE FOR INSPECTING/AUDITING THE FEED MILL ON A REGULAR BASIS	

**DECLARATION BY OWNER/MANAGER OF THE FACILITY**

I, \_\_\_\_\_, the owner/manager of the establishment mentioned in Section A above, hereby agree to comply with all the requirements set by the Department of Agriculture, Forestry and Fisheries in terms of VPN34 for the approval of this establishment and I agree to co-operate with the veterinary officials in this regard.

I understand that the approval of the establishment and the exemption in terms of the Animal Diseases Act (Act 35 of 1984) can be withdrawn at any time if any shortcomings are detected.

I am aware that the establishments identified in section A, B and C must be re-approved on an annual basis and that the onus for the application for re-approval rests with the owners of the establishments.

I am also aware that the exemption must be renewed on an annual basis and that the onus for the application for renewal of exemption rests with me as the applicant for exemption.

Signed at (place) \_\_\_\_\_ on (date) \_\_\_\_\_

Signature of owner/manager

**B. GENERAL INFORMATION OF STERILISING (RENDERING) PLANT**

NAME OF FACILITY	
APPROVAL NUMBER (BM2- no.)(in terms of Act 35)	
REGISTRATION NUMBER (in terms of Act 36 AND Act 40)	
PHYSICAL ADDRESS	
POSTAL ADDRESS	
POSTAL CODE	
TOWN	
PROVINCE	
TELEPHONE NUMBER	
FAX NUMBER	
NAME OF THE MANAGER / OWNER	
E-MAIL ADDRESS OF MANAGER / OWNER	
NAME OF AUTHORISED VETERINARIAN RESPONSIBLE FOR PRIMARY/ANNUAL VETERINARY INSPECTIONS FOR REGISTRATION OF FACILITY	
NAMES OF AUTHORISED INDEPENDENT AUDITING BODY RESPONSIBLE FOR INSPECTING THE RENDERING/STERILISATION PLANT ON A REGULAR BASIS	

**DECLARATION BY OWNER/MANAGER OF THE FACILITY**

I, \_\_\_\_\_, the owner/manager of the establishment mentioned above, hereby agree to comply with all the requirements set by the Department of Agriculture, Forestry and Fisheries in terms of VPN34 for the approval of this establishment and I agree to co-operate with the veterinary officials in this regard.

I understand that the approval of the establishment in terms of the Animal Diseases Act (Act 35 of 1984) can be withdrawn at any time if any shortcomings are detected.

I am aware that the establishment identified above must be re-approved on an annual basis and that the onus for the application for re-approval rests with me.

Signed at (place) \_\_\_\_\_ on (date) \_\_\_\_\_

\_\_\_\_\_  
Signature of owner/manager

**C. GENERAL INFORMATION OF THE ABATTOIR**

NAME OF FACILITY	
APPROVAL NUMBER (in terms of Act 35)	
REGISTRATION NUMBER (BM1- no.)(in terms of Act 40)	
PHYSICAL ADDRESS	
POSTAL ADDRESS	
POSTAL CODE	
TOWN	
PROVINCE	
TELEPHONE NUMBER	
FAX NUMBER	
NAME OF THE MANAGER / OWNER	
E-MAIL ADDRESS OF MANAGER / OWNER	
NAME OF THE HYGIENE MANAGER	
E-MAIL ADDRESS OF HYGIENE MANAGER	
NAME OF AUTHORISED VETERINARIAN RESPONSIBLE FOR PRIMARY/ANNUAL VETERINARY INSPECTIONS FOR REGISTRATION OF FACILITY	
NAMES OF AUTHORISED INDEPENDENT AUDITING BODY RESPONSIBLE FOR INSPECTING THE ABATTOIR ON A REGULAR BASIS	

**DECLARATION BY OWNER/MANAGER OF THE FACILITY**

I, \_\_\_\_\_, the owner/manager of the establishment mentioned above, hereby agree to comply with all the requirements set by the Department of Agriculture, Forestry and Fisheries in terms of VPN34 for the approval of this establishment and I agree to co-operate with the veterinary officials in this regard.

I understand that the approval of the establishment in terms of the Animal Diseases Act (Act 35 of 1984) can be withdrawn at any time if any shortcomings are detected.

I am aware that the establishment identified above must be re-approved on an annual basis and that the onus for the application for re-approval rests me.

Signed at (place) \_\_\_\_\_ on (date) \_\_\_\_\_

\_\_\_\_\_  
Signature of owner/manager

#### D. DECLARATION BY AUDITING BODY

I, \_\_\_\_\_,  
representing the auditing body identified in this application, hereby confirm the following:

1. That I am authorised in writing by the Director Animal Health to perform the audits in terms of VPN34;
2. That I have audited the establishments identified above and the traceability between these establishments and confirm compliance with VPN34;
3. That I have confirmed that all SOPs are in place at the establishments identified in this application to ensure traceability in terms of VPN34.
4. That I will submit monthly reconciliation reports as soon as the system is functional to allow for the traceability can be audited.

Signed at (place) \_\_\_\_\_ on (date) \_\_\_\_\_

Signature of auditor \_\_\_\_\_

