

The Laws of Zambia

REPUBLIC OF ZAMBIA

**THE AGRICULTURE (FERTILISERS AND FEED) ACT**

**CHAPTER 226 OF THE LAWS OF ZAMBIA**

**CHAPTER 226 THE AGRICULTURE (FERTILISERS AND FEED) ACT**

THE AGRICULTURE (FERTILISERS AND FEED) ACT

ARRANGEMENT OF SECTIONS

PART I

PRELIMINARY

*Section*

1. Short title
2. Interpretation

PART II

REGISTRATION, RENEWAL AND CANCELLATION  
OF REGISTRATION

The Laws of Zambia

3. Appointment of Registering Officer
4. Register
5. Application for registration of plant and owner and registration thereof
6. Registration in cases of partnership or joint ownership of plant
7. Inspection on application for registration
8. Provisional registration of plant before inspection
9. Certificate of provisional registration of plant and owner
10. Certificate of registration of plant and owner
11. Renewal of registration
12. Devolution and transfer of registered plant
13. Cancellation of registration of plant, etc.
14. Reasons for refusal to register, etc.: when to be furnished
15. Appeal to Minister
16. Alteration of registration of plant
17. Registration fees

PART III

ANALYSTS AND LABORATORIES

18. Analysts, approval of
19. Laboratories, approval by Minister
20. Rolls of approved analysts and laboratories

*Section*

21. Reports, certificates, etc., of approved laboratories
22. Prohibition against testing of farming requisites in non approved laboratory

PART IV

INSPECTORS: SEARCHES AND SEIZURES

23. Inspectors of farming requisites
24. Duly authorised officers
25. Powers of inspectors and duly authorised officers to search plant and seize machinery, farming requisites, books, etc.
26. Prohibition against obstruction, etc., of inspectors and duly authorised officers

PART V

MANUFACTURE, PROCESSING AND SALE OF  
FARMING REQUISITES

## The Laws of Zambia

27. Prohibition against production of farming requisites or sterilising of bone, etc., in non-registered plant
28. Prohibition against sale of farming requisites not in bulk without prescribed statement
29. Prohibition against sale of farming requisites in bulk without prescribed statement of analysis of bulk material
30. Ingredients of farming requisites sold under trade name, etc., to be disclosed
31. Warranties as to fertilisers and farm feed
32. Conditions for the manufacture or sale of fertiliser or farm feed containing animal substance
33. Prohibition against offering for sale or advertising bone, etc., for farming requisites before sterilisation
34. Certificate of sterilisation of bone, etc., by whom issued
35. Statement required of intended purchaser of non-sterilised bone, etc.
36. Prohibition against sale of non-sterilised bone, etc.
37. Certificate of sterilisation of bone, etc., to be produced for inspection

## PART VI

### IMPORTATION OF FARMING REQUISITES

#### *Section*

38. Power of Minister to prohibit importation of farming requisites
39. Prohibition against importation of farming requisites
40. Conditions for importation of fertilisers and farm feed containing animal substance, bone, etc.
41. Seizure and disposal of unlawfully imported farming requisites

## PART VII

### MISCELLANEOUS

42. Disposal of sub-standard farming requisites
43. Failure to comply with Act or regulations an offence
44. Prohibition against tampering with samples
45. Prohibition against altering, defacing or removing official records, etc.
46. Prohibition against altering, etc., documents and marks

## PART VIII

### PROCEEDINGS AND PENALTY

The Laws of Zambia

47. Certificate or report *prima facie* evidence of facts certified
48. Penalty
49. Secrecy
50. Protection of secret processes, etc., against disclosure
51. Inspection of registers and rolls

PART IX  
REGULATIONS AND RULES

52. Regulations
53. Rules of court

FIRST SCHEDULE-Registration fees

SECOND SCHEDULE-Transfer fees

**CHAPTER 226**

AGRICULTURE (FERTILISERS AND FEED)

*Act No.*  
51 of 1966  
13 of 1994

**An Act to provide for the regulation and control of the manufacture, processing, importation and sale of agricultural fertilisers and farm feed; to provide for minimum standards of effectiveness and purity of such fertilisers and feed; and to provide for matters incidental to or connected with the foregoing.**

[1st January, 1970]

PART I

PRELIMINARY

- 1 This Act may be cited as the Agriculture (Fertilisers and Feed) Act. Short title
2. In this Act, unless the context otherwise requires- Interpretation

The Laws of Zambia

"aggrieved party" means any person whose application for registration under this Act has been refused or made subject to any condition by the Registering Officer; or any person who had been registered as registered owner of a registered plant and whose registration as such registered owner or the registration of such registered plant has been cancelled by the Registering Officer;

"approved analyst" means a person who has been approved as an analyst under and for the purposes of this Act;

"approved laboratory" means any laboratory which has been approved as a laboratory under and for the purposes of this Act;

"brand" means the impression or representation of any letter, number, geometrical figure, mark, sign or symbol, and includes any combination of such impressions or representations;

"compost" means vegetable matter or mixed vegetable and animal matter so decomposed as to form an organic manure;

"court" means a subordinate court, save where otherwise appears;

"farm feed" means any vegetable, animal, chemical or mineral substance, whether in its natural state or which has been artificially prepared, which is alleged to possess nutritive properties and is intended, or offered for sale, or sold, for use in the feeding of livestock; but does not include straw, chaff, unground hay, silage, cereal in the grain, or any substance which falls within this definition but which has been crushed, gristed or ground for a farmer in accordance with his directions for his own use, unless by regulation such substance has been prescribed to be a farm feed for the purpose of this Act;

"farmer" means a person who is engaged in farming in Zambia, either exclusively or together with some profession, business or other occupation;

"farming requisite" means any fertiliser or farm feed, or any substance used in the manufacture of a fertiliser or farm feed;

"fertiliser" means any substance or compound of substances, which is intended or offered for sale, or sold, for use in the improvement or maintenance of the growth of plants or of the productivity of the soil; but does not include farmyard or stable manure; kraal manure, compost, wood ash, town refuse or night soil, when sold in its original conditions and under its name;

"inspector" means a person appointed an inspector under this Act;

"laboratory" means any premises used for scientific work or research and suitably equipped for scientific analysis;

The Laws of Zambia

"livestock" means any horse, mare, gelding, ass, jennet, mule, bull, cow, ox, heifer, steer, calf, sheep, lamb, hog, pig, sow, goat, fowl, ostrich, dog, cat or any other domestic animal, fowl or bird;

"owner" includes any absolute owner, lessee, tenant or licensee of any premises used as a plant, and any agent resident in Zambia of any non-resident owner;

"plant" means any premises used for the purpose of manufacturing, compounding or producing any fertiliser or farm feed, and shall include any sterilising plant;

"registered owner" means the person registered in the register of plant as the owner of any plant registered under the provisions of this Act;

"registered plant" means any plant registered in the register of plant under the provisions of this Act;

"Registering Officer" means the person appointed as such in pursuance of the provisions of section *three*;

"sell" includes to exchange or to barter or to offer, keep, expose, transmit, convey, or deliver for sale, exchange or barter; and cognate words shall be construed accordingly;

"sterilising plant" means any premises used for the sterilising of bone or any other substance derived from animal carcass.

PART II

REGISTRATION, RENEWAL AND CANCELLATION OF REGISTRATION

**3.** (1) There shall be a Registering Officer for the purpose of this Act, who shall be a public officer, and who shall be responsible for the administration of this Act.

Appointment of  
Registering Officer

(2) The Registering Officer may, subject to the general or special directions of the Minister, delegate any of his powers or functions under this Act to any officer of the public service.

4. The Registering Officer shall cause to be kept a register of plant which shall contain-

Register

- (a) particulars of the location of all plant registered under this Act;
- (b) particulars of the purposes for which such plant is approved and registered;
- (c) the names and addresses of the owners of such plant;
- (d) such other particulars as may be prescribed.

5. (1) Application for the registration of plant shall be made to the Registering Officer in the prescribed form and shall be accompanied by the prescribed registration fee.

Application for registration of plant and owner and registration thereof

(2) As soon as practicable after the receipt of such application the Registering Officer shall-

- (a) if he is satisfied that the plant in question complies with the prescribed requirements, register such plant in the register of plant and shall enter therein the name and address of the owner thereof as registered owner;
- (b) if he is not satisfied that the said plant complies with the prescribed requirements, refuse to register such plant and owner.

(3) Any registration under this section shall be valid until cancelled under the provisions of this Act, or until and including the 31st March following the date of such registration, whichever is the earlier.

(4) The Registering Officer may impose such conditions with regard to any registration under this section as he may deem to be necessary in order to ensure that the plant or the owner thereof, or both such plant and owner, comply with the provisions of this Act or with the prescribed requirements.

(5) The refusal of an application under this section for the registration of plant shall not prevent the making, under this section, of a fresh application for the registration of the same plant at any subsequent time.

(6) Any person who, having obtained registration of such plant, or of the owner thereof, or of both such plant and owner, subject to any condition imposed under subsection (4) or as amended by the Minister under section *fifteen*, fails to comply with such condition, shall be guilty of an offence.

6. (1) Where an application is made under this Act for registration of any plant which is owned by two or more persons, whether as partners, or jointly, or as tenants in common, or otherwise, the said partners or joint owners, as the case may be, shall nominate one person among them who, upon registration of the said plant, shall be registered as registered owner.

Registration in cases of partnership or joint ownership of plant

(2) Registration of any person as registered owner in pursuance of the provisions of this section shall not be construed as affecting or limiting in any way any liability present or future existing or arising between such partners or joint owners, or between them and any third person.

7. Upon an application being made under this Act for first registration of any plant, the Registering Officer shall cause such plant to be inspected by an inspector.

Inspection on application for registration

8. Upon application being made under this Act for first registration of any plant, the Registering Officer may, if he so thinks fit, register such plant in the register before it has been inspected in pursuance of section seven, and, when the Registering Officer so registers any such plant, the following provisions shall have effect, that is to say:

Provisional registration of plant before inspection

- (a) such registration shall be provisional only and is in this Act referred to as provisional registration;
- (b) such registration shall not relieve the Registering Officer from the obligation to cause such plant to be inspected by an inspector, save that such inspection may take place after such registration;
- (c) such registration shall not prejudice or affect the power of the Registering Officer to grant or refuse the said application for registration of the said plant;
- (d) if and when the Registering Officer grants the said application, the said provisional registration shall cease to be provisional;
- (e) if and when the Registering Officer refuses the said application, the said provisional registration shall be cancelled;
- (f) when, and so long as, any plant is provisionally registered in the register, such plant shall, subject to the foregoing provisions of this section, be deemed for all of the purposes of this Act to be a registered plant, and the person who is so registered as owner of the said plant shall, subject as aforesaid, be deemed for the said purposes to be the registered owner of the said plant.

9. (1) Upon the provisional registration of any plant under the provisions of section eight, the Registering Officer shall issue a certificate of provisional registration of such plant in the form prescribed, and shall furnish such certificate to the person registered under such registration as provisional registered owner, or his agent.

Certificate of provisional registration of plant and owner

(2) The person so provisionally registered as owner shall cause the said certificate to be displayed in a prominent place within the said plant so registered, and shall keep the same so displayed during the continuance of such provisional registration.



The Laws of Zambia

(3) Any person who fails to comply with the provisions of subsection (2) shall be guilty of an offence.

**10.** (1) Upon the registration of any plant under this Act, the Registering Officer shall issue a certificate of registration of plant and owner in the prescribed form, and shall furnish such certificate to the person registered as owner of such plant, or his agent.

Certificate of registration of plant and owner

(2) The registered owner shall cause the said certificate to be displayed in a prominent place within the plant so registered, and shall keep the same so displayed during the continuance of such registration.

(3) Any person who fails to comply with the provisions of subsection (2) shall be guilty of an offence.

**11.** (1) Any person registered under this Act as registered owner of a registered plant may apply to the Registering Officer, on the form prescribed, for a renewal of the registration of the said plant.

Renewal of registration

(2) Any application for renewal of any registration under this Act must be made to the Registering Officer not more than three months and not less than one month before the expiry of such registration. The Registering Officer may, at any time, extend the time herein prescribed for making any such application for renewal of registration.

(3) Any such application for renewal of registration shall be accompanied by the fee prescribed.

(4) The provisions of section *seven* as to inspection of plant shall not apply to an application for renewal of registration of such plant under this section:

Provided, however, that the Registering Officer may, in his absolute discretion, require such inspection as he deems fit to be made prior to his granting of any such renewal application.

(5) In the event of the death of the person registered under this Act as registered owner of registered plant within six months of the date of expiry of such registration, the Registering Officer shall extend the time herein prescribed for making an application for renewal of such registration to a date not more than six months from the date of the death of the person so registered.

(6) In the event of an extension of time for the making of an application for renewal having been granted by the Registering Officer under any provision of this section and the time granted extends beyond the date of expiry of the registration, the said registration shall be deemed for all of the purposes of this Act to have been extended to the date to which the said extension of time extends:

Provided, however, that upon renewal of such registration being granted, the renewed registration shall relate back to the date of the expiry of the former registration, and the duration of the renewed registration shall be calculated from that date.

**12. (1)** Where a registered owner dies, the following provisions shall have effect, that is to say:

Devolution and  
transfer of registered  
plant

- (a) the death of the said registered owner shall not of itself render unlawful by virtue of this Act, during the period of six months from such death, the carrying on, in the registered plant of which the deceased was registered owner, of the business theretofore carried on in such registered plant;
- (b) the personal representative of the said deceased registered owner (not registered in pursuance of the provisions of section six), or with the assent of such personal representative, any other person, shall (subject to the provisions of this section) be entitled, on application to the Registering Officer, in the form and manner prescribed, to be registered as the registered owner of the said registered plant;
- (c) where the deceased registered owner has been registered in pursuance of the provisions of section six, the surviving partner or joint owner or the nominee of the surviving partners or joint owners, as the case may be, shall (subject to the provisions of this section) be entitled, on application to the Registering Officer, in the form and manner prescribed, to be registered as the registered owner of the said registered plant for the purposes of this Act:

Provided, however, that such registration under this paragraph shall be provisional only, until such time as the Registering Officer is satisfied as to the identity of the person, or persons, actually entitled, in the events which have happened, to the ownership of the said registered plant; whereupon, the Registering Officer may-

- (i) confirm the said provisional registration as full registration, if the person so provisionally registered is entitled to such full registration under this Act; or
- (ii) cancel the said provisional registration and register *in lieu* thereof the person entitled to be registered under this Act as registered owner in respect of the said registered plant;

The Laws of Zambia

- (d) from the death of the said deceased registered owner, until the registration of another person as registered owner, the person actually carrying on the business in the said registered plant shall be deemed to be the registered owner of the said registered plant for the purposes of this Act as relates to things to be done on the said plant, or to be done in the course of carrying on the said business; and for the purposes of notices required by this Act to be given to the registered owner and the service of such notices.

(2) Where the registered owner of a registered plant (in this subsection referred to as the transferor) transfers, on sale or otherwise, the said plant and the business carried on therein to another person (in this subsection referred to as the transferee) the following provisions shall have effect, that is to say:

- (a) the transferee shall (subject to the provisions of this section) be entitled, on application to the Registering Officer, in the form and manner prescribed, and on satisfying the Registering Officer that he has become the proprietor of the said registered plant, to be registered as the registered owner of the said registered plant;
- (b) until the transferee is so registered as the registered owner, the transferor shall, notwithstanding the said transfer, continue to be, for all of the purposes of this Act, the registered owner of the said registered plant.

(3) Where an application is made under this section to the Registering Officer for the registration of a person (in this subsection referred to as the applicant) as the registered owner of a registered plant, the following provisions shall apply and have effect, that is to say:

- (a) where the applicant is the personal representative of a deceased registered owner and is applying under subsection (1) for registration solely in his capacity as such personal representative, and the application is duly made in accordance with the said subsection, the Registering Officer shall not refuse the application;
- (b) in every other case it shall be lawful for the Registering Officer, if he so thinks proper, to refuse the application on the ground that the applicant was previously a registered owner of another plant and while he was so registered the said registration was cancelled by the Registering Officer under this Act; and it shall further be lawful for the Registering Officer to refuse such application upon any other ground which he deems to be a reasonable ground for refusal to register a person as registered owner upon application for first registration of any plant under this Act.

**13.** If the Registering Officer is satisfied-

- (a) that any plant registered under this Act does not comply with any provision of this Act or with any condition or requirement imposed or prescribed under this Act; or
- (b) that any plant is not being used for the purposes for which it has been registered under this Act; or
- (c) that the product of such plant does not conform to the standards prescribed for such product under this Act; or
- (d) that the registered owner of any such plant has been convicted of an offence under this Act;

Cancellation of registration of plant, etc.

he may cancel the registration of such plant and of the registered owner thereof:

Provided that nothing shall be construed to oblige or impose a duty upon the said Registering Officer at any time to exercise the powers by this section conferred upon him.

**14.** (1) Any aggrieved party may, in writing, request the Registering Officer to furnish his reasons for refusing, imposing conditions upon or cancelling any registration under this Act.

Reasons for refusal to register, etc.: when to be furnished

(2) Within seven days after the receipt of such request, the Registering Officer shall furnish, in writing, to the aggrieved party the reasons-

- (a) why he refused the registration applied for; or
- (b) why he imposed conditions on such registration; or
- (c) why he cancelled such registration.

**15.** (1) Any aggrieved party may appeal to the Minister against the decision of the Registering Officer.

Appeal to Minister

(2) Such appeal must be in writing.

(3) In determining such appeal the Minister may consult with the Registering Officer, and may uphold the decision of the Registering Officer, or may make an order instructing the Registering Officer-

- (a) to register the plant, or person, as applied for in the application for registration; or

The Laws of Zambia

- (b) to strike out all or any of the conditions imposed by the Registering Officer, or to amend such conditions in such manner as the Minister may direct; or
- (c) to restore the registration;

and the Registering Officer shall comply with such order.

(4) Upon the written request of an unsuccessful appellant, the Minister shall furnish to him, in writing, the reasons for his decision.

(5) No appeal shall lie to any court from the decision of the Minister.

**16.** (1) The Registering Office may, at any time, alter the registration under this Act of any plant, upon application by the registered owner or by the personal representative of a deceased registered owner, or, in the case of an incorporated body being the registered owner, by the managing director or liquidator of such registered owner.

Alteration of  
registration of plant

(2) The Registering Officer may, at any time, without any such application as aforesaid, alter the registration of any plant in any respect in which such registration appears to him to be erroneous or misleading.

(3) The following provisions shall apply and have effect in relation to the alteration under subsection (2) of the registration of any plant under this Act, that is to say:

- (a) the Registering Officer shall not make any such alteration unless he has given to the registered owner or his personal representative, or its managing director or its liquidator, as the case may be, at least fourteen days' notice in writing that the Registering Officer has under his consideration the making of such alteration and stating the grounds on which such alteration is so under consideration;
- (b) the Registering Officer shall consider any representations, in relation to such alteration, made to him before the expiration of the said notice by any person interested;
- (c) the Registering Officer may, if he thinks fit, cause an inquiry to be held in relation to such alteration;
- (d) such alteration, if made at all, shall be made within three months after the expiration of the said notice.

**17.** (1) Subject to the provisions of this section, there shall be payable to the Registering Officer by any person-

Registration fees

- (a) who is the owner of any plant, on any provisional registration of the said plant and owner under this Act;
- (b) who is the owner of any plant, on first registration of the said plant and owner as registered plant and registered owner thereof, respectively;
- (c) on the annual renewal of any registration of any plant and owner under this Act;

the respective registration fees prescribed in the First Schedule.

(2) Subject to the provisions of this section, there shall be payable to the Registering Officer by any transferee from or successor in interest to any registered owner-

- (a) on any provisional registration of such transferee or successor in interest as registered owner;
- (b) on any full registration of such transferee or successor in interest as registered owner;

the respective registration fees prescribed in the Second Schedule.

(3) Where the personal representative of a deceased registered owner of any plant is registered as registered owner of such plant under the provisions of paragraph (b) of subsection (1) of section *twelve*, solely in his capacity as such personal representative, no registration fee shall be charged for such registration.

(4) Where a surviving or nominated joint owner or partner of a deceased registered owner of any plant is registered provisionally as such registered owner under the provisions of paragraph (c) of subsection (1) of section *twelve*, no registration fee shall be charged for such provisional registration.

### PART III

#### ANALYSTS AND LABORATORIES

**18.** (1) Subject to the qualifications and other requirements prescribed, the Minister may approve persons as analysts for the purposes of this Act. Analysts, approval of

(2) An approval granted by the Minister under this section may be withdrawn by the Minister at any time.

**19.** (1) Subject to the standards and other requirements prescribed, the Minister may, for the purposes of this Act, approve any laboratory as an approved laboratory for any or all of the following purposes: Laboratories, approval by Minister

- (a) the testing of fertilisers; or
- (b) the testing of farm feed; or
- (c) the testing of bone or other substance derived from animal carcass.

(2) Any approval granted under this section may be withdrawn by the Minister at any time.

**20.** The Registering Officer shall cause the following rolls to be kept:

Rolls of approved analysts and laboratories

- (a) a roll of approved analysts, which shall contain-
  - (i) the name and address of each analyst approved by the Minister under section *eighteen*;
  - (ii) the date of such approval;
  - (iii) particulars of the purposes for which such analyst is approved;
  - (iv) if such approval is withdrawn, the date of such withdrawal;
  - (v) such other particulars as may be prescribed;
- (b) a roll of approved laboratories, which shall contain-
  - (i) the name and address of each laboratory approved by the Minister under section *nineteen*;
  - (ii) the name and address of the owner of each such laboratory;
  - (iii) the name and address of each approved analyst attached to each such laboratory;
  - (iv) particulars of the purposes for which such laboratory is approved;
  - (v) if such approval is withdrawn, the date of such withdrawal;

(iv) such other particulars as may be prescribed.

**21.** Any reports, certificates or other documents issued or furnished by an approved laboratory for the purposes of this Act shall be in the forms prescribed.

Reports, certificates, etc., of approved laboratories

**22.** (1) Any person who by any process in any laboratory, not being an approved laboratory under this Act, purports to test, for the purposes of this Act, any farming requisite shall be guilty of an offence.

Prohibition against testing of farming requisites in non-approved laboratory

(2) Upon conviction of any person of an offence under this section, the court may, at the request of the prosecution, and in addition to any other penalty imposed, declare any machinery, equipment or chemicals and any such farming requisite found in such laboratory, to be forfeited, or order them to be destroyed, without compensation; or may both declare them to be so forfeited and order them to be so destroyed, without compensation.

#### PART IV

##### INSPECTORS: SEARCHES AND SEIZURES

**23.** There shall be inspectors of farming requisites who shall be inspectors for the purposes of this Act.

Inspectors of farming requisites

**24.** (1) The Minister may, from time to time, and as often as he deems it necessary, authorise any public officer (herein referred to as a duly authorised officer) to exercise the powers of an inspector of farming requisites under this Act.

Duly authorised officers

(2) An authorisation made under this section may be-

- (a) general, whereby the duly authorised officer shall be empowered to exercise all of the powers of an inspector of farming requisites anywhere in Zambia; or
- (b) limited, either-
  - (i) as to the specific powers exercisable by the duly authorised officer; or
  - (ii) as to the place or district in which such powers are exercisable by him; or
  - (iii) as to both sub-paragraphs (i) and (ii).



(3) An authorisation made under the provisions of this section shall be in writing.

**25.** (1) An inspector, or any duly authorised officer may, for any of the purposes of this Act, and at all reasonable times-

Powers of inspectors and duly authorised officers to search plant and seize machinery, farming requisites, books, etc.

- (a) enter upon any plant, whether registered under this Act or not, and inspect the same and any machinery and equipment to be found therein, which he has reasonable cause to believe are being used in the manufacture, processing or preparation of any farming requisite; and, in the manner prescribed, take, without payment, for testing, samples of any farming requisite found therein, and the owner thereof shall, on demand, furnish to the person taking such samples a statement in writing containing such particulars with respect thereto as are prescribed; and if the plant is not registered under this Act, and he has reasonable cause to believe that this Act is being contravened, he may seize and remove therefrom and detain, any machinery, equipment, farming requisite or any books, records or documents found therein, which would afford evidence of a contravention of this Act; and if the plant is a registered plant, and he has reasonable cause to believe that this Act is being contravened, he may seize and remove therefrom any farming requisite which would afford evidence of a contravention of this Act; and if he has reasonable cause to believe that any of the machinery or equipment is, because of a mechanical or operational defect, contributing to the production of any farming requisite that does not conform to the requirements prescribed therefor, he may, by notice in writing, require the registered owner to rectify the said machinery or equipment within seven days of receipt of such notice, and, in the event of the registered owner failing to comply with the said notice, the inspector or duly authorised officer shall notify the Registering Officer of such failure to comply;
- (b) enter upon any building, place or vehicle at, or in which, he has reasonable cause to believe that any farming requisite is kept, sold or exposed for sale, or is being transported or stored for purposes of sale in contravention of this Act; and, in the manner prescribed, and without payment, take, for testing, a sample of any farming requisite found therein; and inspect any books, records or documents found therein; and he further may seize and remove and detain any such vehicle, and seize and remove from any such building, place or vehicle, and detain, any farming requisite, or any books, records, or documents, which would afford evidence of a contravention of this Act.

(2) Any duly authorised officer shall, on demand by the owner, or by the person having custody of such plant, building, place or vehicle, produce his authority to enter upon such plant, building, place or vehicle.

(3) Any such inspector or duly authorised officer who, under the provisions of subsection (1), seizes and detains any vehicle, machinery, equipment, farming requisite, or any books, records or documents, shall give to the person from whom they were seized a receipt, signed by such inspector or officer, for such vehicle, machinery, equipment, farming requisite, books, records and documents so seized.

(4) In the event of-

- (a) the Registering Officer being advised in writing by the Director of Public Prosecutions that no prosecution consequent upon any such inspection made under subsection (1) should be instituted under this Act; or
- (b) any such prosecution having been finally concluded;

then, in either such event, any vehicle, machinery, equipment, farming requisite, books, records and documents seized during the course of such inspection and detained under the provisions of subsection (1) shall be returned to the owner thereof, or to the person from whose custody they were taken; and shall be so returned within ten days from the date of the receipt by the Registering Officer of such advice that no prosecution should be instituted, or from the date any such prosecution has been finally concluded, as the case may be:

Provided that any such vehicle, machinery, equipment or farming requisite shall not be returnable under this subsection if they have been declared by the court to be forfeited, or ordered to be destroyed, under any provision of this Act.

**26.** Any person who-

- (a) obstructs or impedes an inspector, or a duly authorised officer, in the exercise of any of the powers conferred upon him by or under this Act; or
- (b) refuses to furnish to an inspector, or a duly authorised officer, on request, any particulars or information to which the said inspector or duly authorised officer is entitled by or under this Act; or
- (c) wilfully or recklessly gives to an inspector, or a duly authorised officer, any false or misleading particular or information with respect to any fact or particular to which the said inspector or duly authorised officer is entitled by or under this Act;

Prohibition against obstruction etc., of inspectors and duly authorised officers

shall be guilty of an offence.

## PART V

### MANUFACTURE, PROCESSING AND SALE OF FARMING REQUISITES

**27.** (1) Any person who, by any process, in any plant not registered under this Act, purports-

Prohibition against production of farming requisites or sterilising of bone, etc., in non-registered plant

- (a) to produce, manufacture, compound or process any farming requisite; or

The Laws of Zambia

- (b) to sterilise, for the purpose of this Act, any bone or other substance derived from animal carcass, for use by any person in the manufacture or processing of, or as an ingredient in, any farming requisite;

shall be guilty of an offence.

(2) Upon conviction of any person of an offence under this section, the court may, at the request of the prosecution, and in addition to any other penalty imposed, declare any machinery, equipment, or chemicals, or any farming requisite or bone or other substance derived from animal carcass, found in such plant, to be forfeited, or may order them to be destroyed, without compensation; or may both declare them to be so forfeited and order them to be so destroyed, without compensation.

**28.** Any person who sells any farming requisite in sacks, bags or other containers and who at the time of delivery fails to furnish to the purchaser a statement of the prescribed analysis, in the form prescribed for use on such sale of such farming requisite, shall be guilty of an offence.

Prohibition against sale of farming requisites not in bulk without prescribed statement

**29.** Any person who sells any farming requisite in bulk and who at the time of delivery fails to furnish to the purchaser a statement of the prescribed analysis of the said bulk material, in the form prescribed for use on such sale of such farming requisite, shall be guilty of an offence.

Prohibition against sale of farming requisites in bulk without prescribed statement of analysis of bulk material

**30.** (1) Where any farming requisite is sold in containers or packages, under any trade name, trade mark, trade label or trade brand which is the property of, or exclusive to, the packer thereof, whether he is the manufacturer, processor, compounder or mixer of the said farming requisite, or otherwise, or whether the said trade name is in common use in the trade as a general description of a compound or mixture of certain chemical or other ingredients, there shall appear in legible letters and figures on the outside surface of each such container or package, or on a label attached thereto, a statement disclosing the prescribed analysis of the said farming requisite.

Ingredients of farming requisites sold under trade name, etc., to be disclosed

(2) Any person who sells any farming requisite in a container or package under any trade name, trade mark, trade label or trade brand and who fails to comply with the provisions of this section shall be guilty of an offence.

**31.** (1) Where any person sells for use as a fertiliser any article which has been subjected to any artificial process in Zambia, or which has been imported into Zambia, and furnishes the purchaser with the statement of the prescribed analysis, in the form prescribed for use on the sale of such farming requisite, the said statement shall have effect as a warranty by the seller that on analysis the said fertiliser does not vary beyond the limits of variation of analysis prescribed for such fertiliser.

Warranties as to fertilisers and farm feed

(2) Where any person sells for use as farm feed for livestock any article which has been artificially prepared, and furnishes the purchaser with the statement prescribed, the said statement shall have effect as a warranty that the said farm feed does not vary beyond the limits of variation of analysis prescribed for such farm feed.

(3) On the sale of any article for use as farm feed for livestock, or for any particular class of livestock, there shall be implied a warranty by the seller that the article is suitable to be used as such.

(4) Any statement by the seller as to the percentages of the chemical or other substances contained in any article sold for use as a fertiliser, or as to the nutritive qualities or substances possessed by, or contained in, any article sold for use as farm feed, made after the commencement of this Act in an invoice of such article, or in any document, circular or advertisement descriptive of such article, shall have effect as a warranty by the seller.

**32.** (1) No person shall manufacture, process, compound or sell or offer or expose for sale any fertiliser or farm feed containing bone or any other substance derived from animal carcass unless such bone or other substance has been sterilised in the manner prescribed, and is certified in the manner prescribed as having been so sterilised.

Conditions for the manufacture or sale of fertiliser or farm feed containing animal substance

(2) Any person who fails to comply with the provisions of this section shall be guilty of an offence.

**33.** (1) Any person who, being the owner of any bone or other substance derived from animal carcass, intends to offer or advertise the same for sale for use in the manufacture or processing of, or as an ingredient in, any farming requisite, shall, prior to the making of such offer or the publication of such advertisement, have the said bone or other substance sterilised at or by a registered sterilising plant.

Prohibition against offering or sale or advertising bone, etc., for farming requisites before sterilisation

(2) At the request of the said owner, and upon payment of the fee prescribed, the registered owner of the said registered sterilising plant shall cause the said bone or other substance to be sterilised in the manner prescribed, and shall issue and furnish to the owner thereof a certificate of sterilisation in the form prescribed.

(3) Any person who fails to comply with the provisions of this section shall be guilty of an offence.

**34.** (1) The registered owner of any registered sterilising plant, upon sterilising in the manner prescribed any bone or other substance derived from animal carcass, shall issue, in the form prescribed and to the persons prescribed, a certificate of sterilisation of the said bone or other substance.

Statement required of intended purchaser of non-sterilised bone, etc.

(2) Any person who fails to comply with the provisions of this section shall be guilty of an offence.

**35.** (1) Any person who, for any purpose, intends to buy any bone or other substance derived from animal carcass which has not been sterilised as prescribed, shall furnish to the intended seller a statement in writing, signed by such person or his agent, stating the purpose or purposes for which the said bone or other substance is intended to be used.

Prohibition against sale of non-sterilised bone, etc.

(2) Any person who fails to comply with the provisions of this section shall be guilty of an offence

**36.** (1) No person shall sell any bone or other substance derived from animal carcass which has not been sterilised as prescribed, if the statement provided for under the provisions of section *thirty-five* has not been furnished as prescribed, or, if furnished, it shows that the said bone or other substance is intended for use in the manufacture or processing of, or as an ingredient in, any farming requisite:

Certificate of sterilisation of bone, etc., to be produced for inspection

Provided that this section shall not apply if at the time of such sale, the purchaser directs the seller in writing to deliver, at the expense of the purchaser, the said bone or other substance to a registered sterilising plant for purposes of its being sterilised as prescribed at the expense of the purchaser; and the seller makes such delivery as directed.

(2) Unless it is otherwise provided by agreement between the parties, delivery of the said bone or other substance to a registered sterilising plant under the proviso to subsection (1) shall for all purposes be deemed to be delivery under the contract of sale.

(3) Any person who fails to comply with the provisions of subsection (1) shall be guilty of an offence.

**37.** (1) Save as provided by the proviso to subsection (1) of section *thirty-six*, any person who sells any bone or other substance derived from animal carcass for use in the manufacture or processing of, or as an ingredient in, any farming requisite, shall, upon request, produce for inspection by the purchaser or by an inspector or duly authorised officer, the certificate of sterilisation issued as prescribed in respect of the said bone or other substance.

Power of Minister to prohibit importation of farming requisites

(2) Any person who fails to comply with the provisions of this section shall be guilty of an offence.

PART VI

IMPORTATION OF FARMING REQUISITES

**38.** The Minister may, from time to time, by regulation, restrict, limit or prohibit the importation of any particular farming requisite, or class of farming requisites, into Zambia, without the prior written consent of the Minister.

Prohibition against importation of farming requisites

**39.** (1) Any person who, in contravention of any restriction, limitation or prohibition imposed in pursuance of the provisions of section *thirty-eight*, imports into Zambia any farming requisite shall be guilty of an offence.

Prohibition against importation of farming requisites

(2) Upon the conviction of any person of an offence under this section, the court may, at the request of the prosecution, and in addition to any other penalty imposed, declare the said farming requisite to be forfeited or order it to be destroyed, without compensation; or may both declare it to be so forfeited and order it to be so destroyed, without compensation.

**40.** (1) No person shall import into Zambia-

Conditions for importation of fertilisers and farm feed containing animal substance bone, etc.

(a) any fertiliser or farm feed which contains bone or any other substance derived from animal carcass; or

(b) any bone or any other substance derived from animal carcass for use in the manufacture or processing of or as an ingredient in any farming requisite;

unless he has submitted to the Minister a certificate issued and signed in the country of origin of such fertiliser, farm feed, bone or other substance, by a person designated by the Minister, in which it is stated that such fertiliser or farm feed is free from such pathogenic organisms as are specified, or that such bone or other substance has been sterilised in the manner prescribed and is free from such pathogenic organisms as are specified.

(2) Any person who fails to comply with the provisions of this section shall be guilty of an offence.

(3) Upon conviction of any person of an offence under this section, the court may, at the request of the prosecution, and in addition to any other penalty imposed, declare any such fertiliser or farm feed, or bone, or other substance derived from animal carcass, to be forfeited, or may order it to be destroyed, without compensation; or may both declare it to be so forfeited and order it to be so destroyed, without compensation.

41. (1) Any farming requisite brought to any part of Zambia for purposes of importation in contravention of any of the provisions of this Act, or of any condition thereunder prescribed for such importation, may be seized and detained, subject to the disposal thereof by the Minister under the provisions of subsection (2).

Seizure and disposal  
of unlawfully imported  
farming requisites

(2) If any such farming requisite is detained under the provisions of subsection (1), the Minister may-

- (a) order such farming requisite-
  - (i) to be removed from Zambia within such time as may be specified in the order; or
  - (ii) with the consent of the person to whom the said farming requisite was consigned, or his agent, or of the owner thereof, to be destroyed without compensation; or
- (b) bring proceedings in the manner prescribed by subsection (3), for its forfeiture and destruction; or
- (c) permit the removal thereof subject to such conditions as he may impose; or
- (d) order samples of such farming requisite to be taken and tested in the manner prescribed and-
  - (i) if, upon such test, the said farming requisite is found and certified not to vary beyond the limits of variation of analysis prescribed for such farming requisite, permit the importation thereof into Zambia, subject to such conditions as he may impose; or
  - (ii) if, upon such test, the said farming requisite is found and certified to vary beyond the said limits of variation of analysis prescribed, permit the importation thereof into Zambia, subject to such conditions as he may impose; or bring proceedings in the manner prescribed by subsection (3), for its forfeiture and destruction; or
  - (iii) if, upon such test, the said farming requisite is also found and certified to be in a dangerous state or injurious to the health of human beings, animals or plants, and the Minister deems it to be reasonably necessary so to do, order the said farming requisite to be destroyed forthwith, without compensation.

(3) (a) Where the Minister elects to bring proceedings in pursuance of paragraph (b) of subsection (2) or in pursuance of sub-paragraph (ii) of paragraph (d) of subsection (2), he may, in his name, bring civil proceedings in the court against the owner of the said farming requisite, or against the person to whom it was consigned, as agent of the owner, and in the said proceedings the Minister shall claim for a declaration by the court that the said farming requisite was imported into Zambia in contravention of the provisions of this Act, and for an order that it be forfeited to the Government and destroyed.

(b) Such proceedings shall be commenced by filing with the clerk of the court an affidavit, made by a public officer duly authorised by the Minister in that behalf, setting forth the relevant facts and exhibiting the report or certificate or reports or certificates upon which the declaration and order are sought.

(c) (i) Upon the filing of the said affidavit, the clerk of the court shall assign a date for the hearing of the claim not less than three weeks and not more than six weeks from the date of issue of the writ of summons in accordance with the provisions of sub-paragraph (ii).

(ii) The clerk of the court shall thereupon issue a writ of summons in the form prescribed setting forth therein the date assigned for the hearing of the claim by the court.

(d) The said writ of summons shall be served upon the party named as party defendant therein in the manner prescribed in paragraph (e); and notice of the proceedings in the form prescribed shall be published in the *Gazette* not less than fourteen days prior to the date assigned for the hearing of the claim.

(e) For the purposes of this section, any writ of summons issued under the provisions of this section shall be deemed to have been served upon the party defendant, if, not less than fourteen days prior to the date assigned for the hearing of the claim by the court, a true copy thereof is-

- (i) delivered to the said defendant personally; or
- (ii) addressed to him and left or forwarded by post to him at his usual or last known place of abode or business; or
- (iii) addressed to him forwarded by registered post to his usual or last known post office box number; or
- (iv) where he is unknown, or where he has no address within Zambia, or his address is unknown, published in one issue of the *Gazette*.

(f) If any party defendant served with the said writ of summons as provided in paragraph (e) wishes to defend or oppose or contest the said proceedings, he shall, in the form prescribed, give notice of his intention so to do to the clerk of the court not less than five days before the date assigned in the said writ of summons for the hearing of the said claim.

(g) If any person, who is not a party defendant, desires to defend or oppose or contest the said proceedings, he shall, not less than seven days after the publication of the notice of proceedings pursuant to paragraph (a), give to the clerk of the court notice in writing of his intention so to do; whereupon he shall be entitled to appear at the hearing of the claim as if he were in every respect a party defendant.



(h) If any party defendant fails to comply with the provisions of paragraph (f), or if he, or any person who has given the notice provided for by paragraph (g), fails to appear at the hearing of the claim on the date assigned therefor, the court shall enter his default and may thereupon proceed to hear and determine the claim forthwith on the evidence of the affidavit filed under paragraph (b) and the report or certificate or reports or certificates exhibited therein or may adjourn such hearing and determination to a date not more than two weeks from the date assigned for the hearing of the claim.

(i) Upon hearing the evidence adduced, the court may make the declaration and order sought; or may dismiss the claim and make such order as to costs, consequential upon such dismissal, as the court deems meet.

(j) In the event of a dismissal of the said claim, the Minister may elect to dispose of the said farming requisite in any other manner thereunto provided by subsection (1).

(4) It is hereby declared that any act done or ordered or permitted to be done in terms of this section shall not-

- (a) prevent the institution of criminal proceedings under this Act or under any other written law against the person to whom the said farming requisite was consigned, or his agent, or the owner thereof, or any other person; or
- (b) curtail or limit in any way whatsoever the powers or duties of the Controller of Customs and Excise or of any customs officer under the Customs and Excise Act; or
- (c) affect the liability of any person for the payment of customs duty in respect of the said farming requisite; or
- (d) entitle any person to claim a refund of customs duty paid in respect to any farming requisite seized and dealt with in terms of this section.

Cap. 322

(5) Any person who fails to comply with any order made or condition imposed under this section shall be guilty of an offence.

## PART VII

### MISCELLANEOUS

**42.** (1) If any sample, taken in the manner prescribed, of any farming requisite is, upon test in the manner prescribed, found and certified to vary beyond the limits of variation of analysis prescribed for such farming requisite-

Disposal of  
substandard farming  
requisites

- (a) the Minister may, if the said farming requisite has been seized and is detained under the provisions of this Act-
- (i) subject to such conditions as to its sale and use and to such other conditions as he may impose, direct its return either to the owner thereof or to the persons from whose custody and control it was taken; or
  - (ii) with the consent of the owner thereof, order it to be destroyed without compensation; or
  - (iii) bring proceedings in the manner prescribed by subsection (2) for its forfeiture and destruction; or
  - (iv) if, upon such test, the said farming requisite is also found and certified to be in a dangerous state or injurious to the health of human beings, animals or plants, and the Minister deems it reasonably necessary so to do, order the said farming requisite to be forfeited and destroyed, without compensation;
- (b) the Minister may, if the said farming requisite has not been seized or detained under the provisions of this Act-
- (i) subject to such conditions as to its sale and use and to such other conditions as he may impose, permit the owner thereof to retain the said farming requisite; or
  - (ii) with the consent of the owner thereof, order it to be destroyed without compensation;
  - (iii) bring proceedings in the manner prescribed by subsection (2) for its forfeiture and destruction; and may, if he deems it necessary so to do, at any time prior to or after the commencement of the said proceedings, direct that the said farming requisite be seized and detained pending the determination of the said proceedings; or
  - (iv) if, upon such test, the said farming requisite is also found and certified to be in a dangerous state or injurious to the health of human beings, animals or plants, and the Minister deems it reasonably necessary so to do, order the said farming requisite to be forfeited and destroyed, without compensation; and may for the purposes of this sub-paragraph, if he deems it necessary so to do, order the seizure and detention of the said farming requisite.

(2) (a) Where the Minister elects to act in pursuance of sub-paragraph (iii) of paragraph (a) of subsection (1) or of subparagraph (iii) of paragraph (b) of subsection (1), he may, in his name, bring, or cause to be brought, civil proceedings in the court against the owner of the said farming requisite or against the person from whose custody or control the same was taken, or in whose custody or control the same is found, as agent of the owner; and in the said proceedings the Minister shall claim for a declaration by the court that the said farming requisite varies beyond the limits of variation of analysis prescribed under this Act for such farming requisite; and for an order that it be forfeited to the Government and destroyed, without compensation.

(b) Such proceedings shall be commenced by filing with the clerk of the court an affidavit, made by a public officer duly authorised by the Minister in that behalf, setting forth the relevant facts and exhibiting the report or certificate or reports or certificates upon which the declaration and order are sought.

The Laws of Zambia

(c) (i) Upon the filing of the said affidavit, the clerk of the court shall assign a date for the hearing of the claim not less than three weeks and not more than six weeks from the date of issue of the writ of summons in accordance with the provisions of sub-paragraph (ii).

(ii) The clerk of the court shall thereupon issue a writ of summons in the form prescribed setting forth therein the date assigned for the hearing of the claim by the court.

(d) The said writ of summons shall be served upon the party named as party defendant therein in the manner prescribed in paragraph (e); and notice of the proceedings in the form prescribed shall be published in the *Gazette* not less than fourteen days prior to the date assigned for the hearing of the claim.

(e) For the purposes of this section, any writ of summons issued under the provisions of this section shall be deemed to have been served upon the party defendant if not less than fourteen days prior to the date assigned for the hearing of the claim by the court, a true copy thereof is-

- (i) delivered to the said defendant personally; or
- (ii) addressed to him and left or forwarded by post to him at his usual or last known place of abode or business; or
- (iii) addressed to him and forwarded by registered post to his usual or last known post office box number; or
- (iv) where he is unknown, or where he has no address within Zambia, or his address is unknown, published in one issue of the *Gazette*.

(f) If any party defendant served with the said writ of summons as provided in paragraph (e) wishes to defend or oppose or contest the said proceedings, he shall, in the form prescribed, give notice of his intention so to do to the clerk of the court not less than five days before the date assigned in the said writ of summons for the hearing of the said claim.

(g) If any person, who is not a party defendant, desires to defend or oppose or contest the said proceedings, he shall, not less than seven days after the publication of the notice of proceedings provided for in paragraph (d), give to the clerk of the court notice in writing of his intention so to do; whereupon he shall be entitled to appear at the hearing of the claim as if he were in every respect a party defendant.

(h) If any party defendant fails to comply with the provisions of paragraph (f), or if he, or any person who has given the notice provided for by paragraph (g), fails to appear at the hearing of the claim on the date assigned therefor, the court shall enter his default and may thereupon proceed to hear and determine the claim forthwith on the evidence of the affidavit filed under paragraph (b), and the reports or certificates exhibited therein, or may adjourn such hearing and determination to a date not more than two weeks from the date assigned for the hearing of the claim.

(i) Upon hearing the evidence adduced, the court may make the declaration and order sought; or may dismiss the claim and make such order as to costs, consequential upon such dismissal, as the court deems meet.

(j) In the event of a dismissal of the claim by the court, the Minister may elect to dispose of the said farming requisite in any other manner thereunto provided by subsection (1).

(3) It is hereby declared that anything done or any proceedings taken in terms of this section shall not prevent the institution of criminal proceedings under this Act, or under any other written law, against the owner of the said farming requisite or his agent, or the person from whose custody and control it was taken, or in whose custody or control it is found, as the case may be, or against any other person.

(4) Any person who fails to comply with any order made or condition imposed under paragraph (a) of subsection (1), or under paragraph (b) of subsection (1), shall be guilty of an offence.

**43.** Any person who contravenes or fails to comply with any of the provisions of this Act, or with any regulation, requirement or condition lawfully prescribed thereunder, shall be guilty of an offence.

Failure to comply with Act or regulations an offence

**44.** Any person who-

- (a) tampers with any farming requisite so as to procure that any sample of such farming requisite taken under, and for the purposes of, this Act does not correctly represent the bulk from which the said sample was taken; or
- (b) otherwise tampers with any sample taken under this Act; or
- (c) with intent to deceive, causes or permits to be sent to any approved laboratory, to be tested, for the purposes of this Act, a sample of any farming requisite which to his knowledge does not represent the bulk from which it was taken;

Prohibition against tampering with samples

shall be guilty of an offence.

**45.** Any person who shall, without lawful authority, alter, deface or remove-

- (a) any register, roll, index or other such official record maintained in pursuance of this Act or of any order, requirement or regulation made thereunder; or
- (b) any entry appearing in any such register, roll, index or other such official record;

Prohibition against altering, defacing or removing official records, etc.

shall be guilty of an offence.

**46.** Any person who shall, without lawful authority, alter or deface-

- (a) any certificate, report, invoice, account, or other document, prescribed, issued, furnished or kept under this Act or under any order, requirement, condition or regulation made thereunder; or
- (b) any note, docket or mark placed upon any package or container under this Act or under any order, requirement, condition or regulation made thereunder; or who shall remove any such note, docket or mark from any such package or container upon which it is required to be kept or attached under this Act or under any order, requirement, condition or regulation made thereunder;

Prohibition against altering, etc., documents and marks

shall be guilty of an offence.

## PART VIII

### PROCEEDINGS AND PENALTY

**47.** In any proceedings brought under this Act, the production of any certificate or report of any test prescribed under this Act shall be sufficient evidence of the facts therein stated unless the defendant or person charged requires, as regards a certificate or report issued by an approved laboratory, that the approved analyst or the person who made the analysis be called as a witness:

Certificate or report prima facie evidence of facts certified

Provided that this section shall not apply as regards a certificate or report issued by an approved laboratory where the sample analysed has been taken otherwise than in the manner prescribed.

**48.** Save where otherwise expressly provided by this Act, any person who is convicted by the court of an offence under this Act shall, in the case of a first such offence, be liable to a fine not exceeding three hundred penalty units or to imprisonment for a term not exceeding three months, or to both; and in the case of a second or any subsequent offence, to a fine not exceeding seven hundred and fifty penalty units or to imprisonment for a term of six months, or to both.

Penalty

*(As amended by Act No. 13 of 1994)*

**49.** If any person-

Secrecy

- (a) being a person employed for the purposes of this Act, publishes or communicates to any person without lawful authority any information acquired by him in the course of his employment; or
- (b) having possession of any information which to his knowledge has been disclosed in contravention of this Act, publishes or communicates that information to any other person;

he shall be guilty of an offence and shall be liable to a fine not exceeding fifteen thousand penalty units or to a term of imprisonment not exceeding two years, or to both.

*(As amended by Act No. 13 of 1994)*

**50.** Nothing in this Act shall require particulars of any secret process, formula or preparation to be disclosed, but the Minister shall be entitled to require disclosure to him of the ingredients used (but not the percentages thereof) and may also require that the cost of production (exclusive of overhead charges) shall be furnished by the producer under the certificate, verified by statutory declaration, of a qualified accountant approved by the Minister.

Protection of secret processes, etc., against disclosure

**51.** All registers and rolls maintained by the Registering Officer under this Act shall be open to the inspection of any person applying to the Registering Officer on payment of the fee prescribed.

Inspection of registers and rolls

PART IX

REGULATIONS AND RULES

**52.** The Minister may, by statutory instrument, make regulations for the better carrying out of this Act, and, without prejudice to the generality of the foregoing, such regulations may make provision for-

Regulations

- (a) the forms of registers, rolls, applications, nominations for registration, certificates of registration, reports of sampling, reports of analysis, and such other forms as the Minister deems fit to prescribe under and for the purposes of this Act;
- (b) the forms of records to be kept, and of returns to be made by registered owners and owners of approved laboratories, importers, wholesalers and retailers, for the purposes of this Act;
- (c) standards of hygiene to be maintained in registered plant and approved laboratories;
- (d) the qualifications, professional or otherwise, of persons for approval as analysts under this Act;
- (e) standards of quality and performance of scientific equipment, and the variety of such equipment to be maintained in any laboratory for purposes of approval as an approved laboratory under this Act, together with such other requirements as to the operation of such approved laboratory as the Minister deems necessary; including requirements as to the number of approved analysts to be attached to any such approved laboratory;
- (f) the purpose or purposes for which any particular approved laboratory is approved under this Act;
- (g) limits of variation in the declared analysis of any farming requisite;
- (h) the manner in which samples of any farming requisite are to be taken under this Act; the forms to be used in and about the taking of such samples; and the fees to be paid for the taking of such samples under particular circumstances;
- (i) the methods to be employed by an approved laboratory in the testing of particular farming requisites under and for the purposes of this Act; and the fees to be paid to such approved laboratory for each such test;
- (j) the type of packing of any particular farming requisite which the Minister deems to be of a noxious nature, and which is packed by any registered plant, or by a packer, in packages or containers which are sealed by the plant or the packer and are intended for sale to the general public in such sealed packages or containers;
- (k) the manner of branding, labelling, marking or sealing packages or containers of any particular farming requisites;
- (l) periodic sampling and tests of farming requisites;
- (m) the prevention of the use of false or misleading statements in advertising any farming requisite for sale;
- (n) the prohibition or restriction of the disposal, acquisition or use of any farm feed as a fertiliser;
- (o) the restriction, limitation or prohibition of the importation of any particular farming requisite, or class of farming requisites, into Zambia; and the conditions under which any particular farming requisite may be imported;
- (p) the methods to be employed by a registered sterilising plant in and about the sterilisation of bone and other substance derived from animal carcass;
- (q) the exemption of any particular farming requisite or class of farming requisites from any or all of the provisions of this Act.

- 53.** The Chief Justice may, by statutory instrument, make rules providing for- Rules of court
- (a) with respect to proceedings brought under and in accordance with the provisions of subsection (3) of section *forty-one* and subsection (2) of section *forty-two*, the procedure and practice of the court, the forms to be used therein, the fees payable and the costs and charges to be allowed to legal practitioners practising therein;
  - (b) the proper and effectual exercise of jurisdiction by the court;
  - (c) the procedure and practice relating to appeals from the court.



The Laws of Zambia  
FIRST SCHEDULE

(Section 17)

REGISTRATION FEES

	Fee units
1. For provisional registration of a plant on the register of plant .. .. .	30
2. For provisional registration of an owner on the register of plant .. .. .	30
3. For first registration of a plant on the register of plant .. .. .	60
4. For first registration of an owner on the register of plant .. .. .	60
5. For the annual renewal of a registration of registered plant and registered owner .. .. .	30

(As amended by Act No. 13 of 1994)

The Laws of Zambia  
SECOND SCHEDULE

(Section 17)

TRANSFER FEES

	Fee units
1. For provisional registration of a transferee from, or successor in interest to a registered owner, as registered owner on the register of plant . . . . .	30
2. For full registration of a transferee from, or successor in interest to a registered owner, as registered owner on the register of plant . . . . .	60

(As amended by Act No. 13 of 1994)

**SUBSIDIARY LEGISLATION**

AGRICULTURE (FERTILISERS AND FEED)

CAP 226

THE AGRICULTURE (FERTILISERS) REGULATIONS

ARRANGMENT OF REGULATIONS

PART I

PRELIMINARY

*Regulation*

1. Title
2. Application

PART II

REGISTRATION OF PLANT

3. Registration of plant and fees
4. Register of plant
5. Requirements of plant

PART III

ANALYSTS AND LABORATORIES

The Laws of Zambia

6. Approval of analysts
7. Approval of laboratories
8. Roll of analysts
9. Roll of laboratories

PART IV  
SEARCHES AND SEIZURES

10. Certificates of authority for inspectors

PART V  
SALE OF FARMING REQUISITES

11. Statements of analysis for sales in bags, containers, etc.
12. Statements of analysis for sales in bulk
13. Statements of analysis for sales under trade names, etc

PART VI  
SAMPLING, ANALYSIS AND LIMITS OF VARIATION

*Regulation*

14. Form of report to be used
15. Form of certificate to be used
16. Method of taking samples
17. Methods of analysis
18. Limits of variation

FIRST SCHEDULE-Certificates and forms

SECOND SCHEDULE-Method of taking samples

THIRD SCHEDULE-Methods of analysis of fertilisers

FOURTH SCHEDULE-Limits of variation

FIFTH SCHEDULE-Statements of analysis required for different classes of fertilisers

The Laws of Zambia

SIXTH SCHEDULE-Statement of particular to be lodged with the Registering Officer in respect of fertilisers sold in bags, containers, etc., under any trade name, trade mark, etc., as described in section 30 of the Act

SECTION 52-THE AGRICULTURE (FERTILISERS) REGULATIONS

*Regulations by the Minister*

*Statutory Instrument  
476 of 1969  
117 of 1970  
Act No.  
13 of 1994*

PART I

PRELIMINARY

1. These Regulations may be cited as the Agriculture (Fertilisers) Regulations. Title
2. These Regulations shall apply to any fertiliser as defined in section *two* of the Act. Application

PART II

REGISTRATION OF PLANT

3. (1) Applications under Part II of the Act for registration, transfer of registration or renewal of registration of plant shall be made in Form FERT. 4 in the First Schedule, and such application shall be accompanied by the appropriate fees shown in the First Schedule and the Second Schedule to the Act, and be given to the Registering Officer. Registration of plant and fees
- (2) The Registering Officer shall issue a certificate of registration in Form FERT. 5 in the First Schedule.
- (3) The Registering Officer shall issue a certificate of provisional registration in Form FERT. 6 in the First Schedule.
4. The Registering Officer shall keep a register of plant as prescribed in Form FERT. 1 in the First Schedule. Register of plant
5. Any plant within the definition in section *two* of the Act shall be so equipped as to permit the adequate performance therein of the activities described in the application for registration of such plant, to the satisfaction of the Registering Officer. Requirements of plant

PART III

ANALYSTS AND LABORATORIES

**6.** (1) For the purposes of the Act, an analyst shall furnish proof to the satisfaction of the Minister that he has competent knowledge of chemistry and of chemical analyses, as applied to fertilisers. Such proof shall in every case comprise documentary evidence that such person holds a certificate or diploma attesting his possession of the requisite knowledge and given by a recognised competent body. All such documentary evidence shall be submitted to the Minister when applying for approval. The Minister may call for further evidence if required in any particular case. Approval of analysis

(2) Where the requirements referred to in sub-regulation (1) are satisfied, the Registering Officer shall issue a certificate of approval in Form FERT. 7 in the First Schedule.

**7.** (1) An approved laboratory shall be so equipped as to enable approved analysts to perform accurately for the purposes of the Act all the analyses specified under the Third Schedule, and such laboratories shall have been inspected by a duly authorised officer of the Ministry of Agriculture before approval by the Minister and may be inspected from time to time as the Registering Officer may deem necessary: Approval of laboratories

Provided that, in addition, other laboratories may be approved for certain analyses only, such analyses to be specified by the Registering Officer after inspection by a duly authorised officer of the Ministry of Agriculture.

(2) Where the Minister approves a laboratory, the Registering Officer shall issue a certificate of approval in Form FERT. 8 in the First Schedule.

**8.** The Registering Officer shall keep a roll of approved analysts in Form FERT. 2 in the First Schedule. Roll of analysts

**9.** The Registering Officer shall keep a roll of approved laboratories in Form FERT. 3 in the First Schedule. Roll of laboratories

PART IV

SEARCHES AND SEIZURES

The Laws of Zambia

- 10.** The certificate of authority to be held by inspectors under section *twenty-five* of the Act shall be issued by the Registering Officer and shall be-
- Certificates of authority for inspectors
- (a) in the case of general authorisation, in Form FERT. 11 in the First Schedule; and
  - (b) in the case of limited authorisation, in Form FERT. 12 in the First Schedule.

PART V

SALE OF FARMING REQUISITES

- 11.** The statement of analysis for each class of fertiliser as defined in the Fifth Schedule shall appear in English in lettering both durable and legible on the bag or container containing the same or on a label securely attached thereto.
- Statements of analysis for sales in bags, containers, etc.

- 12.** Where any class of fertiliser as defined in the Fifth Schedule is sold in bulk, the statement of analysis for such class shall appear in English in lettering both durable and legible on a note which shall be given to the purchaser or his agent at the time of delivery of such fertiliser.
- Statements of analysis for sales in bulk

- 13.** Where any class of fertiliser as defined in the Fifth Schedule is sold in a container or a package under a trade name, trade mark, trade label or trade brand, as provided by section *thirty of the Act*, there shall appear in English in lettering both legible and durable on the container or package or on a label securely attached thereto, a statement of analysis in respect thereof and, in addition, there shall be lodged with the Registering Officer, in respect of such fertiliser, a statement of particulars specified in the Sixth Schedule.
- Statements of analysis for sales under trade names, etc.

PART VI

SAMPLING, ANALYSIS AND LIMITS OF VARIATION

- 14.** A report of analysis shall be issued by the analyst performing the analysis in respect of every sample taken under the Act, and any such report shall be in Form FERT. 9 in the First Schedule.
- Form of report to be used

- 15.** A certificate of analysis shall not be issued unless the sample has been taken in accordance with the Second Schedule and such certificate shall be in Form FERT. 10 in the First Schedule.
- Form of certificate to be used

- 16.** Samples for analysis for the purposes of the Act shall be taken in the manner prescribed in the Second Schedule and certificates of sampling issued in relation thereto shall be in Form FERT. 13 in the First Schedule.
- Method of taking samples

The Laws of Zambia

**17.** Methods of analysis shall be as prescribed in the Third Schedule. Method of analysis

**18.** The limits of variation in respect of any prescribed analysis shall be as prescribed in the Fourth Schedule. Limits of variation

The Laws of Zambia  
FIRST SCHEDULE

CERTIFICATES AND FORMS



REPUBLIC OF ZAMBIA

THE AGRICULTURE (Fertilisers and Feed) Act

THE AGRICULTURE (FERTILISERS) REGULATIONS

*(Section 4 and Regulation 4)*

REGISTER OF PLANT

Certificate Number and Date	Location	Name and Purposes for which Registered	Address of registered owner	Remarks (e.g., if only provisional)

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

*(Section 20 (a) and Regulation 8)*

ROLL OF APPROVED ANALYSTS AND ANALYSTS APPROVED FOR  
SPECIAL TECHNIQUES

Name	Address	Recognised qualifications	Purposes for which approved (general or special)	Date approved	Certificate Number	Remarks

NOTE.-Date of withdrawal of approval shall be noted in "Remarks" column opposite the analyst.

REPUBLIC OF ZAMBIA

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

*(Section 20 (b) and Regulation 9)*

ROLL OF APPROVED LABORATORIES

Name and address of Laboratory	Names of approved analysts attached to laboratory	Purposes for which approved	Date of withdrawal	Certificate Number	Remarks (e.g. types of analysis)

REPUBLIC OF ZAMBIA

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

(Sections 5 (1), 11 (1), (3), 17 (1), (2) and Regulation 3)

APPLICATION FOR REGISTRATION, TRANSFER OF REGISTRATION OR RENEWAL OF REGISTRATION

Name of applicant .....

Address .....

Address of plant .....

Nature of activities to be carried out in plant .....

.....

.....

Owner of plant .....

Address of owner .....

Please state whether you are applying for\*(1)-

Fee units

(a)	First registration of plant	..	..	..	..	..	..	60
(b)	Annual renewal of registration of plant	..	..	..	..	..	..	30
(c)	Provisional registration of a plant	..	..	..	..	..	..	30
(d)	Provisional registration of a transferee from, or successor in interest to a registered owner, as registered owner on the register of plant				..	..	..	30
(e)	Full registration of a transferee from, or successor in interest to a registered owner, as registered owner on the register of plant	..	..	..	..	..	..	60

NOTE.-Fees should accompany this application.

\* Strike out those inapplicable.

The Laws of Zambia

FOR OFFICIAL USE ONLY

Ref. No. .... Date received .....

Fee units

First registration	.. .. .	60
Renewal	.. .. .	30
Transfer (Provisional)	.. .. .	30
Transfer (Full)	.. .. .	60
Provisional registration	.. .. .	30

Fee paid ..... Date.....

Inspection by .....

Remarks .....

Certificate issued by .....

Certificate No. .... Date .....

NOTES:

1. This form should be used when applying for registration of any plant or plant ownership.
2. Where a plant is owned by more than one person then one person should be nominated and registered as owner for the purposes of the Act.
3. After this application has been received your plant will be inspected and you will be informed whether or not your plant has been approved for registration with or without conditions.
4. If such an inspection is not immediately practicable your application for registration may be classed as "provisional".

(As amended by Act No. 13 of 1994)

REPUBLIC OF ZAMBIA

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

*(Section 10 (1) and Regulation 3)*

CERTIFICATE OF REGISTRATION OF PLANT

This is to certify that the plant situated at .....  
and used for the purpose of .....  
and owned by ..... has been inspected, approved and registered for the  
purposes of the Act.

This certificate should be displayed in a prominent place in the plant.

.....  
*Registering Officer*

Date .....

No. ....

Receipt No. ....

The Laws of Zambia

FORM FERT. 6

REPUBLIC OF ZAMBIA

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

*(Sections 8 and 9 and Regulation 3)*

CERTIFICATE OF PROVISIONAL REGISTRATION OF PLANT

This is to certify that the plant situated at ..... and used for the purposes of ..... and owned by ..... has been provisionally registered for the purposes of the Act.

This certificate should be displayed in a prominent position in the plant.

.....  
*Registering Officer*

Date .....

No. ....

Receipt No. ....

The Laws of Zambia

FORM FERT. 7

REPUBLIC OF ZAMBIA

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

(Section 18 (1) and Regulation 6)

CERTIFICATE OF APPROVAL OF ANALYST

This is to certify that the Minister of Agriculture, Food and Fisheries has approved .....  
..... as an analyst for the purposes of the Act.

.....  
*Registering Officer*

Date .....

No. ....



THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

(Section 19 (1) and Regulation 7)

CERTIFICATE OF APPROVAL OF LABORATORY

This is to certify that the Minister of Agriculture has approved .....  
.....  
as a laboratory for the purposes of the Act, subject to the following limitations .....  
.....  
.....

.....  
*Registering Officer*

Date .....  
Roll No. ....

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

(Section 21 and Regulation 14)

REPORT OF ANALYSIS

I certify that I received on .....19.....,  
a sample of .....  
from .....

The report is as follows:

Laboratory number .....

Sample number .....

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

Date .....

.....

*Analyst*

NOTE.-To be completed in triplicate and copies despatched as follows:

*Original* -Owner or Seller.

*Duplicate* -Inspector.

*Triplicate* -To be retained by Analyst.

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

(Sections 21 and 47 and Regulation 15)

CERTIFICATE OF ANALYSIS

I certify that I received on ....., 19.....  
 a sample of .....  
 from .....  
 and the analysis of this sample is as declared below.  
 Laboratory number .....  
 Sample number .....

Constituent	Declared Analysis	Actual Analysis

Date .....

.....  
*Analyst*

NOTE.-To be completed in triplicate and copies despatched as follows:  
*Original*-Owner or Seller.  
*Duplicate*-Inspector.  
*Triplicate*-To be retained by Analyst.

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

(Sections 24 (2) and 25 (2) and Regulation 10)

CERTIFICATE OF AUTHORITY FOR INSPECTOR

This is to certify that .....  
has been duly authorised as an Inspector of farming requisites for the purposes of the Act and is empowered to exercise  
all the powers therein described anywhere in Zambia.

Certificate number .....

Date .....

.....  
*Inspector*

.....  
*Registering Officer*

REPUBLIC OF ZAMBIA

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

(Section 24 and Regulation 10)

CERTIFICATE OF LIMITED AUTHORITY FOR INSPECTOR

This is to certify that .....  
has been granted limited authorisation to act as an Inspector of farming requisites for the purposes of the Act and is  
empowered to exercise all the powers therein described except as stated below.

.....  
.....  
.....  
.....

Signature of Inspector .....

Certificate number .....

Date .....

.....

*Registering Officer*

REPUBLIC OF ZAMBIA

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

(Section 52 (h) and Regulation 16)

CERTIFICATE OF SAMPLING

I certify that the accompanying is/are sample(s) of .....  
.....  
taken by me on ....., 19....., at .....  
from stock in charge of .....  
in the presence of .....

(name and address of witness)

The following particulars are given in connection with this/these sample(s).

Sample No.	Description of goods represented by this sample	Quantity of goods represented by this sample

Other particulars .....

Declared analysis as set out in the Fifth Schedule and trade name, trade brand or trade mark, etc., under which sold

Signature of witness .....

Signature of Inspector .....

Date .....

NOTE.-This form is to be completed in triplicate and should be despatched as follows:

*Original*-Analyst.

*Duplicate*-Owner or Seller.

*Triplicate*-To be retained by Inspector.

The Laws of Zambia  
SECOND SCHEDULE

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

*(Section 25 (1) (a), (1) (b) and Regulation 16)*

METHOD OF TAKING SAMPLES

NOTE.-In this regulation "metric ton" is defined as 1,000 kg.

1. Where the fertiliser is contained in packages the samples shall be taken from different parts of the whole quantity as follows:

- (a) if the quantity does not exceed two and a half metric tons, from not less than two unopened packages per ton or part thereof;
- (b) if the quantity exceeds two and a half metric tons, from one additional unopened package for every additional ton or part thereof:

Provided that in no case need samples be taken from more than twenty packages.

2. Where the fertiliser is not contained in packages, not less than two samples per ton or part thereof shall be taken from different parts of the whole quantity:

Provided that not less than six shall be taken and not more than fifty need be taken.

3. The samples shall be taken by means of a suitable sampling probe or by such other means as will ensure, as far as is practicable, the taking of a representative sample.

4. The samples thus taken shall be thoroughly mixed and reduced in size to give a final sample not exceeding six pounds in weight. This final sample shall be mixed and divided into three parts and each of these parts shall be transferred to a clean, dry, non-corrodible container capable of being closed in such a manner as to preserve the contents of the container in their original condition. These three containers shall be so sealed so that they cannot be opened without breaking the seal. Each of these three parts shall be marked with the name of the fertiliser, date and place of sampling and the sample number together with the name of the inspector taking the sample.

5. The first part shall be given to the owner or seller of the fertiliser or his agent, the second part shall be delivered to an approved analyst for analysis, and the third part shall be retained by the inspector for a period of not less than six months after the date on which the Report or Certificate of Analysis is issued.

6. A Certificate of Sampling (Form FERT. 13 in the First Schedule) shall be made out in triplicate at the time of sampling and the relevant copies as detailed in Form FERT. 13 in the First Schedule should accompany each part of the sample.

*(As amended by S.I. No. 117 of 1970)*

The Laws of Zambia

THIRD SCHEDULE

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

*(Section 52 (i) and Regulation 17)*

METHODS OF ANALYSIS OF FERTILISERS



## The Laws of Zambia

### 1. PREPARATION OF SAMPLE:

- (a) Remove any extraneous matter which cannot be conveniently ground and allow for this when calculating results.
- (b) Grind the sample as rapidly as possible to pass through a sieve having apertures about 1 mm. square. In the case of granular fertilisers and dry powdered fertilisers grind a representative portion of about 250 g. to pass through a sieve having apertures about 0.25 mm. square.
- (c) Store the prepared sample in a non-corrodible air-tight container.
- (d) Where a sample is too moist to be ground in its original condition, mix the sample thoroughly and remove a portion for moisture determination. Dry the remaining portion at 100 degrees C except where the sample may lose ammonia or where the sample contains soluble phosphorus compounds. In these instances dry the sample in a desiccator over calcium chloride or silica gel, or alternatively by passing dry air at room temperature over the sample until it is in a suitable condition for grinding. The results of the analysis of the dried sample should be adjusted to the "as received" condition.

### 2. DETERMINATION OF MOISTURE:

Weigh to the nearest mg. about 5 g. of the sample and heat to 100°C for three hours, cool in a desiccator and weigh. Calculate the loss in weight as a percentage of the original weight.

### 3. DETERMINATION OF NITROGEN:

#### (a) REAGENTS

*Ammonia alum.*

*Standard indigo solution.*

Cautiously add 40 ml. of concentrated sulphuric acid to 1 g. of indigo carmine and stir until dissolved. Pour the solution into 800 ml. of water, cool and dilute to 1 litre. Adjust the strength of the solution to comply with the following test:

Add 20 ml. to a solution of 4 mg. of potassium nitrate in 20 ml. of water. Add rapidly 40 ml. of concentrated sulphuric acid and heat to boiling; the blue colour is just discharged in one minute.

*Concentrated sulphuric acid.*

1 : 9 *Sulphuric acid*-Cautiously add 100 ml. of concentrated sulphuric acid to 900 ml. of water. Cool and dilute to 1 litre.

1 : 1 *Sulphuric acid*-Cautiously add 500 ml. of concentrated sulphuric acid to 500 ml. of water. Cool and dilute to 1 litre.

*Anhydrous sodium sulphate.*

*Cupric sulphate.*

*Paraffin wax.*

*Granulated zinc.*

*Light magnesium oxide.*

*50% sodium hydroxide solution*-Dissolve 500 g. of sodium hydroxide in water and dilute to 1 litre.

*0.1 N Hydrochloric acid.*

*Mixed indicator solution*-Grind together in an agate mortar 0.6 g. of methyl red and 0.6 g. of methylene blue. Dissolve the mixture in 500 ml. of 95% ethanol. Shake, filter and store in a dark glass bottle.

*2% Boric acid solution*-Dissolve 20 g. of boric acid in water, dilute to 1 litre and add 5 ml. of the mixed indicator solution.

*Devarda's alloy*: Finely powdered-not less than 80% to pass through a sieve having apertures of about 0.25 mm. square.

#### (b) TEST FOR ABSENCE OF NITRATES

Shake 5 g. of the sample with 80 ml. of water in a 100 ml. volumetric flask. Add 1 g. of ammonia alum, dilute to 100 ml., shake well and filter into a dry beaker. Dilute 1 ml. of the filtrate with 8 ml. of water. Add 1 ml. of standard indigo solution and 10 ml. of concentrated sulphuric acid. Heat to boiling point. If the colour is not discharged regard the sample as free from nitrates.

#### (c) TOTAL NITROGEN (ORGANIC AND AMMONIACAL) IN THE ABSENCE OF NITRATES

(i) Weigh to the nearest mg. about 2 g. of the sample (or an amount containing not more than 250 mg. of nitrogen) and transfer to a Kjeldahl flask. Add 25 ml. of concentrated sulphuric acid and approximately 10 g. of anhydrous sodium sulphate containing 0.4 g. of cupric sulphate. Heat gently until frothing ceases, increase the heat and continue the digestion until the liquid is practically colourless. Continue to heat for a further hour. If frothing is excessive add about 0.5 g. of paraffin wax. Avoid local overheating.

(ii) Transfer the cooled digest to 250 ml. volumetric flask. Thoroughly wash the Kjeldahl flask with successive

The Laws of Zambia

The Laws of Zambia  
FOURTH SCHEDULE

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

(Section 52 (g) and Regulation 18)

LIMITS OF VARIATION

The limits shown shall be the maximum variation allowed above and below the amount stated except in the case of sulphur.

1. *Limits Applicable to all Fertilisers Except in 2 below:*

Nitrogen . . . . .	All forms of nitrogen expressed as % N: 1/10th of amount stated with a minimum of 0.3% N and a maximum of 1.0% N.
Phosphorus . . . . .	Water-soluble phosphorus expressed as % P: 1/20th of amount stated with a minimum of 0.2% P and a maximum of 0.9% P.
Potassium . . . . .	Total potassium expressed as % K: 1/20th of amount stated with a minimum of 0.6% K and a maximum of 1.7% K.
Chloride . . . . .	Percentage chloride expressed as % Cl: 1/20th of amount stated.
Boron . . . . .	Percentage boron expressed as % B: 1/5th of amount stated.
Sulphur . . . . .	No variation allowed below minimum amount stated.

2. *Limits Applicable to Borax and Other Borates for Use as Fertilisers:*

Percentage boron expressed as % B: 1/10th of amount stated with a maximum of 1.0% B.

3. *Sulphate of Ammonia:*

In addition to the other limits applicable in 1 above, percentage of free acid content:

1/5th of amount stated or 0.025% whichever is the greater, expressed as percentage by weight of sulphuric acid (H<sub>2</sub>SO<sub>4</sub>).

The Laws of Zambia  
FIFTH SCHEDULE

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

(Sections 28, 29 and 52 (k) and Regulations 11 and 12)

STATEMENTS OF ANALYSIS REQUIRED FOR DIFFERENT CLASSES  
OF FERTILISERS

<i>Class of Fertiliser</i>	<i>Statement of Analysis to be Shown on Bags, Containers or Labels, and Notes to Accompany Sales in Bulk</i>
Nitrogenous fertilisers	Percentage of total nitrogen.
Ammoniated phosphates and ammoniated super- phosphates.	Percentage of total nitrogen.  Percentage of water-soluble phosphorus expressed in the elemental form (P). Minimum percentage of sulphur expressed in the elemental form (S).
Single, double or triple super-phosphates.	Percentage of water-soluble phosphorus expressed in the elemental form as (P).
Potassic fertilisers.	Percentage of potassium expressed in the elemental form (K).
Any other inorganic fertiliser or compound, complex, blend or mixture of fertilisers.	Percentage of total nitrogen (N).  Percentage of water-soluble phosphorus expressed in the elemental form (P).  Percentage of potassium expressed in the elemental form (K).  Percentage of boron expressed in the elemental form (B).  Minimum percentage of sulphur expressed in the elemental form (S).
Borax and other borates for use as fertilisers.	Percentage of boron expressed in the elemental form.

The Laws of Zambia  
SIXTH SCHEDULE

THE AGRICULTURE (FERTILISERS AND FEED) ACT

THE AGRICULTURE (FERTILISERS) REGULATIONS

(Section 30 and Regulation 13)

STATEMENT OF PARTICULARS TO BE LODGED WITH THE REGISTERING OFFICER IN RESPECT OF FERTILISERS  
SOLD IN BAGS, CONTAINERS, ETC., UNDER ANY TRADE NAME, TRADE MARK, ETC., AS DESCRIBED IN SECTION  
30 OF THE ACT

1. Percentage by weight of nitrogen:
  - (a) in the ammonium form;
  - (b) in the nitrate form;
  - (c) in the urea form;
  - (d) in any other form.
2. Percentage by weight of water-soluble phosphorus expressed as (P).
3. Percentage by weight of potassium expressed as (K):
  - (a) in the chloride form;
  - (b) in the sulphate form;
  - (c) in any other form.
4. The minimum percentage by weight of sulphur expressed as (S).
5. The percentage by weight of boron expressed as (B).
6. In the case of sulphate of ammonia only the percentage of free acid.
7. The trade name, brand name, etc., under which the product is to be sold.
8. By whom sold .....
- Address .....
- .....
- .....

THE AGRICULTURE (FARM FEED) REGULATIONS

ARRANGEMENT OF REGULATIONS

PART I  
PRELIMINARY

*Regulation*

1. Title
2. Interpretation
3. Application

PART II  
REGISTRATION

4. Registration of plant and fees
5. Register of plant
6. Requirements of plant

PART III  
ANALYSIS AND LABORATORIES

7. Approval of analysts
8. Approval of laboratories
9. Roll of analysts
10. Roll of laboratories

PART IV  
SEARCHES AND SEIZURES

11. Certificate of authority for inspectors

PART V  
SALE OF FARM FEED

*Regulation*

12. Statements of analysis for sales in bags, containers, etc.
13. Statements of analysis for sales in bulk
14. Statements of analysis and records to be kept for sales under trade names, etc.
15. Exemption of farm feed made to specification
16. Deleterious ingredients
17. Declaration of presence of certain ingredients upon sale

PART VI

SAMPLING, ANALYSIS AND LIMITS OF VARIATION

18. Form of report to be used
19. Form of certificate to be used
20. Method of taking samples
21. Methods of analysis
22. Limits of variation

FIRST SCHEDULE-Implied definitions

SECOND SCHEDULE-Statements of analysis

THIRD SCHEDULE-Records to be kept in connection with farm feed sold under trade names, etc.

FOURTH SCHEDULE-Deleterious ingredients

FIFTH SCHEDULE-Ingredients which must be declared

SIXTH SCHEDULE-Method of taking samples

SEVENTH SCHEDULE-Methods of analysis

EIGHTH SCHEDULE-Limits of variation

SECTION 52-THE AGRICULTURE (FARM FEED) REGULATIONS

*Statutory Instrument  
197 of 1970*

*Regulations by the Minister*

PART I

PRELIMINARY

1. These Regulations may be cited as the Agriculture (Farm Feed) Regulations. Title
2. In these Regulations, unless the context otherwise requires- Interpretation

"the Act" means the Agriculture (Fertilisers and Feed) Act.

"Minister" means the Minister responsible for Agriculture.

3. These Regulations shall apply in relation to any farm feed as defined in section *two* of the Act. Application

## PART II

### REGISTRATION

4. (1) Applications under Part II of the Act for registration, transfer of registration or renewal of registration of plant shall be made in Form FERT 4 in the First Schedule to the Agriculture (Fertilisers) Regulations, 1969 (hereinafter in these Regulations referred to as "the Fertilisers Regulations") and such application shall be accompanied by the appropriate fees shown in the First and Second Schedules to the Act, and be given to the Registering Officer. Registration of plant and fees. S.I. No. 476 of 1969

(2) The Registering Officer shall issue a certificate of registration in Form FERT 5 in the First Schedule to the Fertilisers Regulations.

(3) The Registering Officer shall issue a certificate of provisional registration in Form FERT 6 in the First Schedule to the Fertilisers Regulations.

5. The Registering Officer shall keep a register of plant as prescribed in Form FERT 1 in the First Schedule to the Fertilisers Regulations. Register of plant

6. Any plant within the definition of section *two* of the Act shall be so equipped as to permit the adequate performance therein of the activities described in the application for registration of such plant, to the satisfaction of the Registering Officer. Requirement of plant

## PART III

### ANALYSTS AND LABORATORIES



7. (1) For the purposes of the Act an analyst shall furnish proof to the satisfaction of the Minister that he has competent knowledge of chemistry and of chemical analyses, as applied to farm feed, and such proof shall in every case comprise documentary evidence that the analyst holds a certificate or diploma attesting his possession of the requisite knowledge and given by a recognised competent body, and shall be submitted to the Minister when applying for approval, so, however, that the Minister may call for further evidence if required in any particular case. Approval of analysts

(2) Where the requirements referred to in sub-regulation (1) are satisfied, the Registering Officer shall issue a certificate of approval on Form FERT 7 in the First Schedule to the Fertilisers Regulations.

8. (1) An approved laboratory shall be so equipped as to enable approved analysts to perform accurately for the purposes of the Act all the analyses specified under the Seventh Schedule to these Regulations and such laboratories shall have been inspected by a duly authorised officer of the Ministry of Agriculture, Food and Fisheries before approval by the Minister and may be inspected from time to time as the Registering Officer may deem necessary: Approval of laboratories

Provided that, in addition, other laboratories may be approved for certain analyses only, such analyses to be specified by the Registering Officer after inspection by a duly authorised officer of the Ministry of Agriculture, Food and Fisheries.

(2) Where the Minister approves a laboratory, the Registering Officer shall issue a certificate of approval on Form FERT 8 in the First Schedule to the Fertilisers Regulations.

9. The Registering Officer shall keep a roll of approved analysts in Form FERT 2 in the First Schedule to the Fertilisers Regulations. Roll of analysts

10. The Registering Officer shall keep a roll of approved laboratories in Form FERT 3 in the First Schedule to the Fertilisers Regulations. Roll of laboratories

## PART IV

### SEARCHES AND SEIZURES

11. The certificate of authority to be held by inspectors under section *twenty-five* of the Act shall be issued by the Registering Officer and shall be- Certificate of authority for inspectors

- (a) in the case of general authorisation, in Form FERT 11 in the First Schedule to the Fertilisers Regulations; and
- (b) in the case of limited authorisation, in Form FERT 12 in the First Schedule to the Fertilisers Regulations.

PART V

SALE OF FARM FEED

- 12.** The statement of analysis for each class of farm feed specified in the Second Schedule to these Regulations shall appear in English in lettering both durable and legible on the bag or container containing the same or on a label securely attached thereto. Statements of analysis for sales in bags, containers, etc.
- 13.** Where any class of farm feed specified in the Second Schedule to these Regulations is sold in bulk, the statement of analysis for such class shall appear in English in lettering both durable and legible on a note which shall be given to the purchaser or his agent at the time of delivery of such farm feed. Statements of analysis for sales in bulk
- 14.** Where any class of farm feed specified in the Second Schedule to these Regulations is sold in a container or a package under a trade name, trade mark, trade label or trade brand, as provided by section *thirty* of the Act, there shall appear in English in lettering both durable and legible on the container or package, or on a label securely attached thereto, a statement of analysis in respect thereof and, in addition, the Registering Officer shall have access to such records relating thereto as are specified in the Third Schedule to these Regulations. Statements of analysis and records to be kept for sales under trade names, etc.
- 15.** Where any farm feed is manufactured to a farmer's own specifications, such farm feed shall be exempted from these Regulations, but only if the farm feed is for the sole use of the farmer supplying the specifications and is not intended for re-sale. Exemption of farm feed made to specification
- 16.** No class of farm feed shall contain any of the ingredients listed as deleterious in the Fourth Schedule to these Regulations. Deleterious ingredients
- 17.** The presence in any farm feed of any of the materials specified in the Fifth Schedule to these Regulations shall be declared in writing to the purchaser of any farm feed whether sold in containers, in bulk or under any trade name, trade mark, trade label or trade brand. Declaration of presence of certain ingredients upon sale

PART VI

SAMPLING, ANALYSIS AND LIMITS OF VARIATION

- 18.** A report of analysis shall be issued by the analyst performing the analysis in respect of every sample taken under the Act, and any such report shall be in Form FERT 9 in the First Schedule to the Fertilisers Regulations. Form of report to be used

The Laws of Zambia

**19.** A certificate of analysis shall not be issued unless the sample has been taken in accordance with the Sixth Schedule to these Regulations and such certificate shall be in the Form FERT 10 in the First Schedule to the Fertilisers Regulations. Form of certificate to be used

**20.** Samples for analysis for the purposes of the Act shall be taken in the manner prescribed in the Sixth Schedule to these Regulations and certificates of sampling issued in relation thereto shall be in Form FERT 13 in the First Schedule to the Fertilisers Regulations. Method of taking samples

**21.** Methods of analysis shall be as prescribed in the Seventh Schedule to these Regulations. Methods of analysis

**22.** The limits of variation in respect of any prescribed analysis shall be as prescribed in the Eighth Schedule to these Regulations. Limits of variation

The Laws of Zambia  
FIRST SCHEDULE

**Agriculture (Fertilisers and Feed) Act**

**Agriculture (Farm Feed) Regulations**

(Section 2)

DEFINITIONS IMPLIED ON THE SALE OF FARM FEED UNDER CERTAIN NAMES

<i>Name of Farm Feed or Class of Feed</i>	<i>Implied Definition</i>
Cereal brans	By-products produced in the milling of maize, wheat or other cerealkernels.
Oilseed cakes or meals (undecorticated)	Meals or cakes produced from the residues resulting from the removal of oil from undecorticated groundnuts, cottonseeds, sunflower seeds, soya beans or other oilseeds.
Oilseed cakes or meals (decorticated)	Meals or cakes produced from the residues resulting from the removal of oil from decorticated or partly decorticated groundnuts, cottonseeds sunflower seeds, soya beans or other oilseeds.
Meat and bone meal	The product, containing not less than 40 per cent of protein (and not more than 4 per cent of salt) obtained by drying and grinding animal carcasses or portions thereof (excluding hoof and horn) to which no other matter has been added, but which may have been treated previously for the removal of oil or fat.
Bone meal	Commercially pure bone, raw or degreased, which has been ground or crushed.
Meat meal	The product, containing not less than 55 per cent of protein (and not more than 4 per cent of salt) obtained by drying and grinding animal carcasses or portions thereof (excluding hoof and horn) to which no other matter has been added but which may have been treated previously for the removal of oil or fat.
Fish meal	A product obtained by drying and grinding or otherwise treating fish or fish waste.
Molasses	A concentrated syrup product obtained in the manufacture of sugar from sugar cane, to which no other matter has been added.
Molasses feed and molasses.	Any mixture (containing not less than 10 per cent of sugar) of an absorbent material
Mixture of molasses	Any mixture of molasses and urea with or without any absorbent material.
Compound cakes and meals	A homogeneous mixture of two or more farm feeds.
Concentrated or high energy farm feed	A homogeneous mixture of two or more farm feeds or other substances intended to be mixed with some other farm feed before feeding to livestock.

NOTE:

"Commercially pure" means that no other matter has been added. In the case of every article mentioned in this Schedule the definition shall be deemed not to exclude the presence of a substance added to improve the keeping or handling properties of the farm feed or the presence of any coccidiostat, anti-blackhead remedy, natural or synthetic hormone.

"Synthetic hormone" means a synthetic compound which has similar properties to, or has the property of stimulating the production of, a natural hormone.

"Coccidiostat" means a substance used in the prevention or curative treatment of disease in poultry caused by protozoal organisms of the order coccidia.

"Anti-blackhead remedy" means a substance used in the prevention or curative treatment of infection in poultry due to *Histomonas Meleagridis*.

The Laws of Zambia

SECOND SCHEDULE

**Agriculture (Fertilisers and Feed) Act**

**Agriculture (Farm Feed) Regulations**

(Sections 28, 29 and 52K and regulations 12, 13 and 14)

STATEMENTS OF ANALYSIS REQUIRED FOR DIFFERENT CLASSES OF FARM FEED

<i>Class of Farm Feed</i>	<i>Statement of Analysis</i>
Cereal brans	Percentages of protein, oil and fibre.
Oilseed cakes or meals (undecorticated)	Percentages of protein and oil.
Oilseed cakes or meals (decorticated)	Percentages of protein, oil and fibre.
Meat and bone meal	Percentages of protein, oil and phosphorus.
Bone meal	Percentages of protein and phosphorus.
Meat meal	Percentages of protein, oil and phosphorus.
Fish meal	Percentages of protein, oil, phosphorus and salt.
Molasses	Percentage of sugar.
Molasses feed	Percentages of sugar and fibre.
Mixture of molasses and urea	Percentages of sugar and protein equivalent of urea.
Compound cakes and meals	Percentages of oil, fibre and protein (including the protein equivalent of urea, if any)
Concentrated or high energy feed	Percentages of oil, fibre and protein (including the protein equivalent of urea, if any); a statement of the proportions in which the feed should be mixed with other farm feed defined by name or class.

NOTES:

1. The amount of protein, except in the case of Compound Cakes and Concentrated or High Energy farm feed, means the amount of nitrogen other than ammoniacal, nitric or urea nitrogen, multiplied by 6.25. In the case of Compound Cakes and High Energy farm feed the amount of protein means the amount of nitrogen other than ammoniacal and nitric nitrogen multiplied by 6.25. The amount of protein equivalent of urea means the amount of urea nitrogen multiplied by 6.25.

2. In all cases the names of any added vitamins, minerals, antibiotics and synthetic or natural hormones shall be declared in the statement of analysis.

3. In all cases the maximum percentage of urea present in any farm feed shall be declared.

The Laws of Zambia  
THIRD SCHEDULE

**Agriculture (Fertilisers and Feed) Act,**

**Agriculture (Farm Feed) Regulations.**

*(Section 30 and regulation 14)*

STATEMENTS OF ANALYSIS AND RECORDS TO BE KEPT FOR SALES UNDER TRADE NAMES, ETC.

Manufacturers of farm feeds shall keep records of all ingredients used in manufacturing any farm feed which is sold under a trade name, trade mark, trade label or trade brand. Such records shall be available for inspection at all reasonable times by a duly authorised officer, and shall be kept in such a manner as to enable the Registering Officer or any duly authorised officer to ascertain the materials from which any lot or batch of farm feed have been manufactured, and the proportions of such materials contained in the farm feed.

The Laws of Zambia  
FOURTH SCHEDULE

**Agriculture (Fertilisers and Feed) Act,**

**Agriculture (Farm Feed) Regulations,**

*(Section 52 and regulation 16)*

DELETERIOUS INGREDIENTS IN FARM FEED

1. Salts soluble in water, if present in a farm feed in proportion likely to be injurious to the health of livestock.
2. All poisonous substances in quantities likely to be injurious to the health of livestock for which the farm feed is intended whether or not such substances are naturally present in the farm feed or material(s) from which the farm feed was manufactured.
3. Sand, siliceous matter or other insoluble mineral matter not naturally associated with ingredients of the farm feed which do not fall within the scope of this Schedule, or which, even if naturally so associated, are present in greater proportion than the maximum that may be expected to be due to such natural association.
4. For the purposes of this paragraph the term "insoluble" shall imply insolubility as determined by the prescribed method; the term "natural association" shall be construed as applying to average commercial samples of the farm feed or its ingredients with which it may be claimed that a particular mineral ingredient is associated.

The Laws of Zambia  
FIFTH SCHEDULE

**Agriculture (Fertilisers and Feed) Act,**

**Agriculture (Farm Feed) Regulations.**

*(Section 52 and regulation 17)*

INGREDIENTS IN FARM FEED THE PRESENCE OF WHICH MUST BE DECLARED

1. Husks, chaff, glumes, hulls, nutshells or skins of nuts, from any source, whether ground or unground, treated or untreated, when used as separate ingredients or artificial mixtures in the manufacture of farm feed.

Where the kernels naturally associated in seeds with one or other of the above materials are present in a farm feed along with material with which they are associated, regard shall be had to the proportion of the above materials that might reasonably be expected to accompany such kernels, when the seed from which they are derived is in its natural condition, provided that feeding in this condition is regarded as a common practice in the feeding of livestock.

2. Peat, peat moss or sugar cane pith, treated or untreated, ground or otherwise.
3. Wheat, maize or sorghum straw, maize rachis, ground or otherwise.
4. Sawdust or any other form of wood, treated or untreated.



The Laws of Zambia  
SIXTH SCHEDULE

**Agriculture (Fertilisers and Feed) Act.**

**Agriculture (Farm Feed) Regulations.**

*(Section 52 (h) and regulations 19 and 20)*

METHOD OR TAKING SAMPLES

## The Laws of Zambia

NOTE-In this regulation "metric ton" is defined as 1,000 kg.

1. Where a farm feed is contained in packages the samples shall be taken from different parts of the whole quantity as follows:

- (a) if the quantity does not exceed one ton, from not less than two unopened packages per ton or part thereof;
- (b) if the quantity exceeds one ton but does not exceed two tons, from not less than four unopened packages;
- (c) if the quantity exceeds two tons but does not exceed three tons, from not less than six unopened packages;
- (d) if the quantity exceeds three tons, from one additional unopened package for every additional ton or part thereof, but in no case need samples be taken from more than fifteen packages.

2. Where a farm feed is not contained in packages, a proportion calculated in accordance with paragraph 1 shall be taken from different parts of the whole quantity.

3. The samples shall be taken by means of a suitable sampling probe or by any other means as will ensure, as far as is practicable, the taking of a representative sample.

4. When a farm feed consists of material uneven in character, bulky or likely to get matted together, portions shall be taken from the selected packages, or from different parts of the farm feed if in bulk, any matted portions torn up, and all the portions thoroughly mixed together.

5. The samples thus taken shall be thoroughly mixed and reduced in size to give a final sample not exceeding six pounds in weight. This final sample shall be mixed and divided into three parts and each of these parts shall be transferred to a clean, dry, noncorrodible container capable of being closed in such a manner as to preserve the contents of the container in their original condition. These three containers shall be so sealed that they cannot be opened without breaking the seal. Each of these parts shall be marked with the name of the farm feed, date and place of sampling and the sample number together with the name of the inspector taking the sample.

6. When the farm feed is in liquid condition it should be thoroughly mixed before sampling. When in containers, samples shall be taken as follows:

Where the number of containers-	Portions shall be drawn from-
exceeds 1 but does not exceed 20	not less than 2 containers
exceed 20 but does not exceed 40	not less than 4 containers
exceed 40 but does not exceed 60	not less than 6 containers
exceed 60	one extra container for every 20 containers by which the total exceeds 60.

Where the farm feed is in liquid condition and is in bulk a representative sample shall be taken in accordance with the scale of sampling set out above.

The portions drawn shall be mixed together in a clean, dry container and a sample of 1 kg weight shall be taken. The sample shall be divided into three equal parts by pouring successive portions into each of three clear glass bottles or jars, preferably with wide mouths. The bottles or jars shall be provided with air-tight stoppers or with lids which shall be so fastened that spillage or evaporation of the contents is prevented. Each of the bottles or jars shall be so sealed that they cannot be opened without breaking the seal. Each of the bottles or jars shall be marked with the name of the farm feed, date and place of sampling and the sample number together with the name of the inspector taking the sample.

7. In the case of all samples the first part shall be given to the owner or seller of the farm feed or his agent, the second part shall be delivered to an approved analyst for analysis and the third part shall be retained by the inspector for a period of not less than six months after the date on which the report or certificate of analysis is issued.

8. A certificate of sampling (Form FERT 13 in the First Schedule to the Agriculture (Fertilisers) Regulations, 1969) shall be made out in triplicate at the time of sampling and the relevant copies as detailed in the form should accompany each part of the sample.

The Laws of Zambia  
SEVENTH SCHEDULE

**Agriculture (Fertilisers and Feed) Act.**

**Agriculture (Farm Feed) Regulations.**

*(Section 52 (i) and regulation 21)*

METHODS OF ANALYSIS

## The Laws of Zambia

### NOTE:

1. In this Schedule "water" means distilled or purified water except where stated.
2. *Reagents* should be of the appropriate analytical purity.

### PREPARATION OF SAMPLE

- (a) If the sample is in a fine condition and passes through a sieve having apertures of one millimetre square, it shall be thoroughly mixed and a portion not less than 100 grams in weight shall be placed in a stoppered bottle. From this portion the quantities for analysis shall be taken.
- (b) If the sample does not wholly pass through a sieve having apertures of one millimetre square and wholly passes through a sieve having apertures of three millimetres square, it shall be thoroughly mixed and a portion for the determination of the moisture content shall be taken at once.
- (c) If the sample is in a coarse condition as, for example, pieces of cake, it shall be carefully pulverised until the whole passes through a sieve having apertures of three millimetres square. It shall then be thoroughly mixed and a portion for the determination of the moisture content shall be taken at once.
- (d) From the mixed sample as in (b) above, or from the coarsely crushed sample as in (c) above, a portion not less than 100 grams in weight shall be taken and further powdered and passed through a sieve having apertures of one millimetre square. The portion of the sample so prepared shall be placed in a stoppered bottle and from it the quantities for analysis shall be taken.
- (e) If the original sample is appreciably moist, or if for any reason the operations of pulverisation and mixing are likely to result in loss or gain of moisture, the moisture in the bottled portion shall be determined as well as in the portion taken for that purpose under (b) or (c) above in order that the results of the analysis may be corrected to correspond with the original sample as regards moisture.
- (f) Materials which cannot conveniently be pulverised or passed through a sieve shall be thoroughly mixed by the most suitable means.

### DETERMINATION OF MOISTURE

A weighed quantity of the sample shall be dried at 100°C and then be reweighed.

### DETERMINATION OF OIL OR FAT (ETHER EXTRACT)

#### *Reagents:*

*Petroleum ether*-light petroleum-b.p. 40°C to 60°C.

NOTE-If ambient temperature of the laboratory demands then petroleum ether- light petroleum-of b.p. 60°C to 80°C may be used.

### METHOD

Extract 2 to 5 grams of the sample, which has been dried for 1 hour at 100°C, in a Soxhlet extraction apparatus with petroleum ether for a period of at least 6 hours. After evaporation of the solvent, dry the oil or fat for 30 minutes at 100°C, cool in a desiccator and weigh. Calculate the oil or fat percentage as follows:

$$\frac{(A-B) \times 100}{C}$$

where A = weight in grams of the Soxhlet flask after extraction

B = weight in grams of the Soxhlet flask before extraction

C = weight in grams of the sample taken.

### DETERMINATION OF FIBRE

#### *Reagents:*

*Sulphuric acid solution*-Prepare a solution containing 1.25 grams of sulphuric acid per 100 ml from chemically pure sulphuric acid. (0.255N).

*Sodium hydroxide solution*-Prepare a solution containing 1.25 grams of sodium hydroxide from carbonate-free sodium hydroxide. (0.313N).

*Dilute hydrochloric acid solution* (1:100).

*Ethyl alcohol* (95 per cent v/v).

### METHOD

Transfer a 2 to 3 gram sample, from which the bulk of the oil or fat has been extracted, to a conical flask (1 litre). Measure 200 ml of the sulphuric acid solution and heat to boiling; add to the flask, connect the flask to a condenser and heat. Bring the contents of the flask to boiling within one minute and boil gently and continuously for exactly 30 minutes. Rotate the flask at intervals of about 5 minutes to mix the contents thoroughly; do not allow any material to adhere to the sides of the flask out of contact with the solution.

At the end of 30 minutes remove the flask and immediately filter with suction through a Whatman No. 54 or No. 541 filter paper (or equivalent) fitted to a Hartley funnel or Buchner funnel. The time of filtration of the bulk of the 200 ml of liquid should not exceed 10 minutes. Wash with boiling water until the washings are free from acid.

Wash the material back into the flask with 200 ml of sodium hydroxide solution (measured at ordinary temperature and heated to boiling point). Boil again for exactly 30 minutes, observing the precautions stated for the acid treatment.

At the end of 30 minutes, remove the flask and immediately either filter direct through a suitable filter crucible or through

The Laws of Zambia

The Laws of Zambia  
EIGHT SCHEDULE

**Agriculture (Fertilisers and Feed) Act.**

**Agriculture (Farm Feed) Regulations.**

(Section 52 (g) and regulation 22)

LIMITS OF VARIATION

<i>Farm Feed</i>	<i>Limits of Variation</i>
Cereal brans .. .. .	Protein, one tenth of the amount stated. Oil, 0.75 per cent or one tenth of the amount stated, whichever is the greater. Fibre, one eighth of the amount stated.
Oilseed meals or cakes (undecorticated) .. .. .	Protein, one tenth of the amount stated. Oil, 0.75 per cent or one tenth of the amount stated, whichever is the greater.
Oilseed meals or cakes (decorticated) .. .. .	Protein, one tenth of the amount stated. Oil, 0.75 per cent or one tenth of the amount stated, whichever is the greater. Fibre, one eighth of the amount stated.
Meat and bone meal .. .. .	Protein, one tenth of the amount stated. Oil, 0.75 per cent or one tenth of the amount stated, whichever is the greater. Phosphorus, one tenth of the amount stated.
Bone meal .. .. .	Protein, one tenth of the amount stated.
Meat meal .. .. .	Phosphorus, one tenth of the amount stated. Protein, one tenth of the amount stated. Oil, 0.75 per cent or one tenth of the amount stated, whichever is the greater.
Fish meal .. .. .	Protein, one tenth of the amount stated. Oil, 0.75 per cent or one tenth of the amount stated, whichever is the greater. Phosphorus, one tenth of the amount stated. Salt, 0.75 per cent.
Molasses .. .. .	Sugar, one twentieth of the amount stated.
Molasses feed .. .. .	Sugar, one tenth of the amount stated. Fibre, one eighth of the amount stated.
Mixtures of molasses and urea .. .. .	Sugar, one tenth of the amount stated. Protein equivalent of urea, one fifth of the amount stated.
Compound cakes and meals, and. . . . .	Protein, one tenth of the amount stated. Protein, concentrated or high energy farm equivalent of urea, 1.25 per cent or one feed, fifth of the amount stated. Oil, 0.75 per cent or one tenth of the amount stated, whichever is the greater. Fibre, one eighth of the amount stated.

**Endnotes**

**1 (Popup - Popup)**

Strike out those inapplicable.