

Appendix C

Proposed Fertilizer Regulations, 2003

Under

Proposed Fertilizer Act, 2003

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For the

Government of Malawi

September, 2003

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PART I

General Provisions

Citation 1. These Regulations may be cited as The Fertilizer Regulations, 2003.

Interpretation 2. In these Regulations unless the context otherwise requires –
“Act” means the Fertilizer Act, 2003;

“fertilizer” means a substance containing one or more recognized plant nutrient(s) that is used for its plant nutrient content and is designed for use or claimed to have value in promoting plant growth;

“chemical fertilizer” means fertilizer produced by chemical processes or mined and derived from an inorganic substance or synthetic organic substance;

“organic fertilizer” means fertilizer derived from non-synthetic organic material, including sewage sludge, animal manures, and plant material, produced through the process of drying, cooking, composting, chopping, grinding, fermenting, or other methods and makes a declaration of nutrient value on the label;

“single fertilizer” means a fertilizer having one primary plant nutrient;

“compound fertilizer” means a fertilizer having at least two primary plant nutrients;

“mixed fertilizer” means a fertilizer derived from a mixture of various kinds or types of chemical and/or organic fertilizer;

“plant nutrient” means a chemical element in fertilizer that is recognized as essential for plant growth;

- (a) “primary nutrients” mean the elements nitrogen, phosphorus, and potassium;
- (b) “secondary nutrients” mean the elements calcium, magnesium, and sulfur;
- (c) “micronutrients” mean the elements boron, chlorine, cobalt, copper, iron, manganese, molybdenum, sodium, and zinc;

“grade” means the percentage of total nitrogen (N), available phosphate (P_2O_5), and soluble potassium (K_2O) stated in whole numbers in the same terms, order, and percentages as in the guaranteed analysis. For example, a 10-10-10 grade would contain 10% nitrogen, 10% available phosphate, and 10% soluble potassium;

“guaranteed analysis” means the minimum percentage of all plant nutrients claimed. Primary nutrients shall be expressed as total nitrogen (N), available phosphate (P_2O_5), and soluble potassium (K_2O). Secondary nutrients and micronutrients shall be expressed in their elemental form;

“brand” means a term, design, or trademark used in connection with

one or several grades of fertilizer;

“producer” means a person who produces, supplies, and sells fertilizers in Malawi;

“importer” means a person who imports, consigns, sells, barter, or otherwise supplies and sells fertilizers in Malawi;

“dealer” means a person other than a producer or importer who supplies and sells fertilizers in Malawi;

“official sample” means any sample of fertilizer taken by an inspector or agent of the Malawi Fertilizer Regulatory Service (MFRS) and designated as official by the MFRS;

“tonne” means a net weight of one thousand (1,000) kilograms;

“net weight” means the weight appearing on containers of fertilizer and shall always refer to the actual weight of the fertilizer in the container;

“percent or percentage” means the percentage by weight;

“lot or sampling unit” means a defined quantity of fertilizer that can be sampled officially and has a boundary. The boundary may be physical, for example, a container, single vehicle, or that amount delivered under a single invoice, or hypothetical, for example, a particular time interval in the case of a flow of fertilizer. The quantity of a given lot or sampling unit shall be specified in a Malawi Fertilizer Inspection Manual which will be prepared as required in Regulation 7;

“schedule” means a schedule appended to these regulations;

“investigational allowance” means an allowance for variations inherent in the taking, preparation, and analysis of an official sample of fertilizer;

“actual value” means the actual value of the fertilizer as determined by calculating the relative percentage of the value found by analysis to the guaranteed value;

“deficiency” means the amount of plant nutrient found by analysis less than that guaranteed, which may result from a lack of plant nutrient ingredients or from lack of uniformity; and

“container” means a receptacle directly in contact with a fertilizer

whereby it may be transported or stored in unit quantities.

Confidentiality

3. (1) The MFRS shall treat every application for a certificate of registration as confidential except when ordered to release such information from an application –

(a) as ordered by a court of law; or

(b) as requested by the head of state of Malawi;

(2) The MFRS shall release information under this Regulation only after notifying the applicant.

Proprietary Information

The MFRS shall treat, as proprietary, any information supplied by an applicant for a certificate of registration or a registrant. Proprietary information may include tonnage reports, data from a testing program for slowly released products, analytical methods for evaluating a slowly released product, or other information considered exclusive to that person.

Publication of Information

of The MFRS shall publish annually and in such form as may be deemed proper –

(a) information concerning the distribution of fertilizers in Malawi by tonnage and region but not by registrant; and

(b) results of analyses based on official samples of fertilizer taken by Inspectors as compared with the guaranteed analysis.

PART II

Fertilizer Regulatory System

Malawi Fertilizer Regulatory Service

6. (1) The MFRS created by the Act, is responsible for the administration and enforcement of the provisions of the Act and regulations enacted under the Act.

(2) The MFRS shall be headed by a Commodity Team Leader.

*Malawi Fertilizer
Advisory
Committee*

7. (1) The MFAC, created by the Act, shall be advisory to the MFRS and may make recommendations on all technical matters pertaining to these regulations including, but not limited to, the inspection and enforcement program and additional or revised regulations required to accomplish the objective of the Act.

(2) The MFAC shall be comprised of –

- (a) the Director of the Department of Agricultural Research Services (DARS) who will serve as chairman of the committee;
- (b) the Deputy Director of the Technology Management Division, DARS;
- (c) the Deputy Director of the Technology Development Division, DARS;
- (d) three representatives from the fertilizer private sector;
- (e) a representative of the Department of Environmental Affairs, Ministry of Natural Resources;
- (f) a representative of the Malawi Bureau of Standards;
- (g) 3 representatives of farmers associations in Malawi; and
- (h) the Commodity Team Leader of the MFRS who will also serve as secretary of the committee.

(3) The Minister shall appoint all the members of the committee on proposition of the concerned bodies.

(4) For each committee position, a designee shall be identified by the concerned body or bodies.

(5) A private sector member shall hold office for a term of two (2) years and may be reappointed. Apart from vacating the office as a result of term expiration, a private sector member vacates his office upon –

- (a) death;
- (b) resignation; or
- (c) having been sentenced by a final judgment of the court to a

term of imprisonment, except for an offence committed through negligence or a petty offence.

When a private sector member vacates his office before the expiration of his term, the Minister shall appoint an additional member to fulfill the unexpired term of the vacated post.

(6) No less than one-half of the committee members shall be present at a meeting to constitute a quorum. If the chairman is not present at the meeting, the committee members present shall elect one from among themselves to act as the presiding chairman.

(7) A final decision of the committee shall be taken by majority vote. Each member shall have one vote. The chairman shall cast a vote only if needed to obtain a majority vote.

(8) The committee shall have the power to appoint other committee(s) to undertake any work entrusted by the committee and the Provisions of (6), (7), and (9) of this Regulation shall apply to meetings of any appointed committee(s).

(9) The members of the committee shall receive no salary but shall be entitled to payment of necessary per diem and travel expenses in accordance with the prevailing Government rules.

(10) The committee shall meet twice a year and may also meet at the call of the committee Chairman, the Minister, or at the request of at least six (6) members.

*Inspection,
Sampling
Analysis*

and 8. (1) The Inspectors necessary for the administration and enforcement of the Act shall be appointed by the Minister.

(2) The Analysts necessary for the administration and enforcement of the Act shall be appointed by the Minister.

(3) Inspectors and Analysts shall take an oath before a Court of Competent Jurisdiction.

(4) Inspectors shall have the authority to enter upon any premise or carrier during regular business hours in order to have access to fertilizer and fertilizer records subject to provisions of the Act and regulations enacted under the Act.

(5) On entering any place where fertilizer is offered for sale, an Inspector shall, if so required, produce official identification to any

person in charge of that place.

(6) The owner or person in charge of any place where fertilizer is distributed shall give an Inspector all reasonable assistance to enable the Inspector to carry out his duties and shall furnish the Inspector with any information he may reasonably require with respect to the administration of the Act and regulations enacted under the Act.

(7) The methods of inspection, sampling, sample preparation, and analysis shall be those approved by the Minister as set forth in a Malawi Fertilizer Inspection Manual and a Malawi Fertilizer Analytical Manual. In cases not covered by such methods or in cases where methods are available in which improved applicability has been demonstrated, the MFRS may adopt such appropriate methods from other sources.

(8) Official analyses will be performed on official samples by a laboratory(s) designated by the Minister.

(9) The MFRS, in determining for administrative purposes whether any fertilizer contains less plant nutrients than stated on the label, shall be guided solely by the official sample as defined in Regulation 2.

(10) The results of official analysis of fertilizers and portions of official samples shall be distributed by MFRS as provided by the Act and regulations enacted under the Act. Official samples determined to be deficient in plant nutrient(s) shall be retained for a minimum of 180 days from issuance of a deficiency report.

(11) Upon the analysis of an official sample of fertilizer, the MFRS shall issue to the concerned registrant a report showing the results of samples that were found to be deficient. This report shall be issued within sixty (60) days from the date the official sample was taken.

Registration

9. (1) Any person who intends to sell or import for their own use fertilizer in Malawi shall do so under and in accordance with the terms and conditions of a certificate of registration. Certificates of Registration shall be issued by the MFRS.

(2) An application for a certificate of registration shall include –

(a) The name and address of the applicant; and

(b) The name and address of each of the applicant's fertilizer sales points in Malawi.

(3) The application for a certificate of registration shall be accompanied by the fee hereinafter required.

(4) Every certificate of registration shall, unless suspended or canceled, be valid for a maximum period of three (3) years from the date of issue, and the certificate of registration shall be renewed upon submission of a new application and payment of the required registration fee.

(5) The registration fee shall be determined by the Minister and cover a three (3)-year period for the certificate of registration.

(6) The registrant shall inform the MFRS in writing of additional distribution points established during the period of the certificate of registration.

(7) The MFRS shall grant a certificate of registration within thirty (30) days of the receipt of application to any person who applies provided that no certificate of registration shall be granted to a person –

- (a) if the previous certificate of registration is under suspension;
- (b) if the person has been convicted of an offence under the Act or regulations enacted under the Act within three (3) years immediately preceding the date of making the application;
- (c) if the person fails to enclose the registration fee with the application; or
- (d) if the application is incomplete in any respect.

(8) If the MFRS fails to issue a certificate of registration within the prescribed time period and the applicant has valid documentation (for example, a copy of a notarized completed application form and a copy of a registered check for the fee payment, payable to the MFRS) to show that a proper application has been submitted to the MFRS, the applicant may begin selling fertilizer while awaiting receipt of a certificate of registration from the MFRS.

(9) The MFRS shall notify the applicant in writing within thirty (30) days of the receipt of the application of any reasons as stated in subsection 7 paragraphs (a), (b), (c), or (d) of this Regulation why a certificate of registration cannot be issued. Failure to do so shall be viewed as permission by the MFRS for the applicant to begin selling fertilizer while awaiting receipt of a certificate of registration.

(10) The MFRS shall provide the applicant with a copy of the Act, regulations enacted under the Act, and the Malawi Inspection Manual at the time the certificate of registration is issued.

(11) Any person aggrieved by a cancellation of their certificate of registration who desires to appeal against it, shall appeal it in the first instance to the Minister.

(12) The Minister shall make a determination on the appeal within a period of thirty (30) days after the receipt of written notification of the grievance.

(13) If the grievance is not determined within the period by the Minister or if the person is dissatisfied with the decision of the Minister, that person may appeal to the Court of _____ in his area of operation.

Labels

10. (1) The following information in the format presented is the minimum required for all fertilizer labels. For packaged products, this information shall either (a) appear on the front or back of the package and occupy at least one-third of a side of the package or (b) be printed on a tag and attached to the package. This information shall be in a readable and conspicuous form. For bulk products, this same information in written or printed form shall accompany delivery and be supplied to the purchaser at time of delivery.

- (a) brand (if applicable);
- (b) grade, only when primary nutrients are claimed;
- (c) guaranteed analysis;

total nitrogen (N) _____%
_____ % ammoniacal nitrogen
_____ % nitrate nitrogen
_____ % urea nitrogen
_____ % water-insoluble nitrogen
_____ % other recognized and determinable forms of N

(Note: If the chemical forms of N are claimed or required, the form shall be guaranteed in the format shown and the percentages of the individual forms shall add up to the total nitrogen percentage. No implied order of the forms of nitrogen is intended.)

available phosphate (P₂O₅) _____ %
soluble potassium (K₂O) _____ %
(other nutrients, elemental basis) _____ %

- (d) net weight;
- (e) sources of nutrients, when shown on the label, shall be listed below the guaranteed analysis statement; and
- (f) name and address of the registrant.

(2) If claims are made on the label other than nutrient guarantees, the MFRS may require that the registrant provide –

- (a) A testing program conducted by a reputable researcher acceptable to the Commodity Team Leader for Fertilizer Services that substantiates the claims made on the label, and
- (b) A laboratory procedure acceptable to the Commodity Team Leader for Fertilizer Services for evaluating these claims.

Inspection Fees

11. (1) There shall be paid to the MFRS for every tonne of fertilizer distributed in Malawi an inspection fee/tonne at a rate to be determined by the Minister, but the inspection fee/tonne shall not exceed 0.5% of the average retail price of a tonne of urea.

(2) Every person who distributes fertilizer in Malawi shall submit on forms provided by the MFRS a quarterly statement for the reporting period setting forth the number of tonnes of fertilizer distributed during this period. The report shall be due on or before twenty (20) days following the close of the filing period and upon filing of the statement shall pay the inspection fee at the rate stated in subsection (1) of this Regulation. If the tonnage report is not filed and the payment of inspection fees are not made within twenty (20) days after the due date, a collection fee amounting to ten percent (10%) of the amount due shall be assessed against the distributor and added to the amount due.

(3) When more than one person is involved in the distribution of a fertilizer, the last person who has the fertilizer and has a certificate of registration and who distributed to a nonregistrant or consumer is responsible for reporting the tonnage and paying the inspection fee, unless the report and payment are made by a prior distributor of the fertilizer.

(4) If a fertilizer producer in Malawi exports part or all of its products, that portion exported shall not be subject to inspection fees.

(5) If a fertilizer importer in Malawi exports part or all of its products, that portion exported shall not be subject to inspection fees.

(6) Any raw materials imported into Malawi to produce finished fertilizer products, including blends, shall not be subject to inspection fees. However, the finished fertilizer products produced from the imported raw materials and sold in Malawi shall be subject to inspection fees.

(7) Inspection fees collected shall be used for the payment of the costs of inspection, sampling, analysis, and other expenses necessary for the administration and enforcement of the Act and regulations enacted under the Act.

Inspection Fund

12. (1) The Inspection Fund, as described in the Act, shall be lodged in an MFRS special account and can only be utilized to finance the activities of the MFRS including but not limited to travel cost of inspectors; purchasing, replacing, or repairing equipment; analytical fees; purchasing and replacing office supplies; replacing expendable inspection items; and salaries.

(2) A portion of the Inspection Fund, depending on availability, shall be held in reserve to facilitate the continued operation of the MFRS.

PART III

Offences and Punishments

*Plant Nutrient
Deficiency*

13. (1) If the analysis shows that a fertilizer is deficient in one or more of its guaranteed plant nutrients beyond the investigational allowances or if the actual value of the fertilizer is below the established level (Schedule A), the value of the deficiencies shall be assessed by utilizing the penalty system set out in Schedule B. Plant nutrient value will be calculated on the basis of the price documented in the inspection report for the inspected lot.

(2) All penalty payments assessed under this Regulation shall be paid by the registrant to the concerned consumer within one (1) month after the date of notice from the MFRS to the registrant. If the consumer cannot be found, the amount of the penalty payments shall be deposited with the Ministry of Finance. Receipts documenting either of these payments shall be promptly forwarded to the Commodity Team Leader for Fertilizer Services.

(3) A deficiency in an official sample of fertilizer resulting from non-uniformity is not distinguishable from a deficiency due to actual plant

nutrient shortage and is properly subject to official action.

(4) Nothing contained in this Regulation shall prevent any person from appealing to a court of competent jurisdiction for judgment as to justification of such penalty payments.

Misbranding

14. (1) No person shall distribute or offer for sale misbranded fertilizer. A fertilizer shall be deemed to be misbranded –

- (a) if its label is false or misleading in any manner;
- (b) if it is distributed or offered for sale under the name of another fertilizer product;
- (c) if it is not labeled as prescribed by the Act and regulations enacted under the Act; or
- (d) if it falsely purports to be or is represented as a plant nutrient or fertilizer, unless such plant nutrient or fertilizer conforms to the definition of identity.

Adulteration

15. (1) No person shall distribute an adulterated fertilizer product. A fertilizer shall be deemed to be adulterated –

- (a) if it contains any deleterious or harmful substance in sufficient amount to render it injurious to beneficial plant life, animals, humans, aquatic life, soil, or water when applied in accordance with directions for use on the label, or if adequate warning statements or directions for use which may be necessary to protect plant life, animals, humans, aquatic life, soil, or water are not shown upon the label;
- (b) if its composition falls below or differs from that which it is purported to possess by its label; or
- (c) if it contains unwanted crop seed or weed seed.

Short Weight

16. (1) If any fertilizer container in the possession of a registrant is found to be short in weight by more than one percent (1%), the registrant in possession of the short weight containers shall be in violation of the Act and these regulations.

(2) Three violations within a three (3)-year period shall result in a suspension of the certificate of registration for one hundred and eighty (180) days. A fourth violation within the three (3) year period shall

result in a permanent cancellation of the certificate of registration.

Obstruction of Inspectors

17. (1) No person shall obstruct or hinder an Inspector in the performing of his duties.

(2) No person shall make a false or misleading statement either orally or in writing to an Inspector or other MFRS officer engaged in performing his duties.

Stop Sale Order

18. (1) The Inspector shall have the authority to issue and enforce a written or printed “stop sale, use, or removal” order to the owner or custodian of any lot of fertilizer and hold it at a designated place when the Inspector finds the said fertilizer as being offered for sale in violation of any provisions of the Act or regulations enacted under the Act.

(2) The Inspector shall release the held fertilizer when the requirements of the Act or regulations enacted under the Act have been complied with and all costs and expenses incurred in connection with the “stop sale, use, or removal” order have been paid.

Violations

19. (1) Any violation whose penalty is not covered in these regulations shall be considered as an offence punishable under section 13 of the Act.

(2) The MFRS, after a hearing with the concerned registrant, may refuse to renew or may suspend or revoke a certificate of registration for repeated violations of the Act or regulations enacted under the Act. After the loss of a certificate of registration, the person so deprived has a right to appeal to the appropriate authority as specified in subsections (11), (12), and (13) of Regulation 9.

(3) If the MFRS seizes any lot of fertilizer, he shall immediately issue to the person that has control of such material a hold order or notice, and he may affix to the lot or container of such material a warning tag that states the lot is so held.

(4) Any lot of fertilizer for which a hold order or notice is issued shall be held by the person having control of such material and shall not be distributed or moved except under the specific directions of the MFRS, pending final disposition pursuant to these regulations. This shall not prevent the person having control of the material from inspecting any material so seized nor taking there from, in the

presence of a person designated by the MFRS, a representative sample for evidence.

(5) Upon demand of the person having control of the seized fertilizer, at or prior to the time of the sampling by the Inspector, the sample that is drawn shall be divided into two approximately equal parts, one part of which shall be sealed and given to the person in control of the product and one part that shall be kept for analysis by the MFRS.

(6) If the analysis of the seized and held lot, as determined by an Analyst, is not in violation of the provisions of the Act or regulations enacted under the Act, the MFRS shall immediately release the seized and held lot and remove the hold order or tag.

(7) If the seized and held lot is found to be in violation, the MFRS shall take either of the following actions –

(a) continue to hold the lot until such time as requirements of these regulations have been complied with, at which time the lot shall be released; or

(b) issue orders for the disposal of the lot in a manner specified by the MFRS.

(8) The person having control of a seized or held lot found to be in violation of the provisions of these regulations may appeal the results of analysis to the MFRS in writing within fifteen (15) days of receiving the notice of violation. Upon receipt of such appeal, the MFRS shall take a further sample of the lot in question for analysis, and the cost of sampling and analysis shall be at the expense of the person that requests the appeal sample. The findings from the appeal analysis shall be final.

PART IV

Special Provisions

20. (1) When ingredients of some fertilizers that are used on specific crops or in specific applications are deemed to be harmful to the growth of the plant, the maximum content of the potentially harmful substances shall be stated on the label. For example –

(a) when urea is labeled to be used as a foliar spray or to fertilize citrus crops, the biuret content shall be limited to 1.5%;

*Special
Considerations for
Harmful
Substances*

- (b) when fertilizers are labeled to be used on crops that are extremely sensitive to chloride, such as tobacco, such fertilizers shall have a maximum of 2.5% chlorine; and
- (c) a warning or caution statement shall be included on the label for any product that contains micronutrients when there is evidence that these micronutrients in excess of a particular percentage may be harmful to certain crops, grazing animals, or where there are unusual environmental conditions.

(2) When the content of harmful substances exceeds the maximum guarantee stated on the label, these fertilizers shall be deemed adulterated.

Environmental Issues

21. (1) Heavy Metal Limits—The maximum permissible heavy metal limits in fertilizer products are set out in Schedule C.

(2) Nutrient Management—The Government of Malawi is vitally interested in protection of the environment. Research has established the beneficial effects of proper fertilizer application on crop response, which lessens pollution of surface waters by protecting soils from erosion. Conversely, research has also shown that under certain management and climatic conditions improper application of fertilizer can result in movement of fertilizer nutrients to surface and/or groundwater sources. Therefore, the Government of Malawi endorses the voluntary use of nutrient management plans by farmers to include appropriate fertilizer application practices combined with best management practices. Appended to these regulations as Schedule D is a policy statement regarding environmental control concerning the application of fertilizer.

Plant Nutrient Guarantees

22. (1) Plant nutrients when mentioned in any form or manner on the label shall be guaranteed. Except for phosphate (P₂O₅) and potassium (K₂O), guarantees shall be made on the elemental basis. Sources of the elements guaranteed and proof of availability shall be provided to the Commodity Team Leader for Fertilizer Services upon request.

(2) The minimum percentage that may be guaranteed is as follows:

<u>Element</u>	<u>Percent</u>
Nitrogen (N)	1.0
Phosphate (P ₂ O ₅)	1.0
Potassium (K ₂ O)	1.0
Calcium (Ca)	1.00

Magnesium (Mg)	0.50
Sulfur (S)	1.00
Boron (B)	0.0200
Chlorine (Cl)	0.1000
Cobalt (Co)	0.0005
Copper (Cu)	0.0500
Iron (Fe)	0.1000
Manganese (Mn)	0.0500
Molybdenum (Mo)	0.0005
Sodium (Na)	0.1000
Zinc (Zn)	0.0500

(3) Guarantees or claims for the plant nutrients listed in subsection (2) are the only ones that will be accepted.

(4) When any of the elements listed in subsection (2) above are guaranteed, the registrant shall upon request, provide the Commodity Team Leader for Fertilizer Services with a copy of the label and directions for the use of the fertilizer.

(5) Any of the elements listed in subsection (2) above that are guaranteed shall appear in the order listed.

*Slowly Released
Plant Nutrients*

23. (1) No fertilizer label shall bear a statement that connotes or implies that certain plant nutrients contained in a fertilizer are released slowly over a period of time, unless the nutrient or nutrients are identified and guaranteed as to their slow-release characteristics.

(2) The term "slow release" shall be used to describe fertilizer products that release (convert to a plant-available form) their plant nutrients at a slower rate relative to a "reference soluble" product. Examples of slow-release products are coated or occluded, which control the release of soluble nutrients through coating or occlusion of the soluble nutrient compounds; water insoluble; or slowly available water soluble –

- (a) coated slow release includes products such as sulfur-coated urea, polymer-coated urea, and other encapsulated soluble fertilizers;
- (b) occluded slow release includes products where fertilizers are mixed with waxes, resins, or other inert materials and formed into particles;

(c) water insoluble includes products such as organic fertilizers, ureaform materials, urea-formaldehyde products, insobutylidene diurea, and oxamide; and

(d) slowly available water-soluble includes products such as urea-formaldehyde products, methylenediurea, dimethylenetriurea, and dicyanodiamide.

(3) The term “stabilized” shall be used to describe fertilizer products that have been amended with an additive that reduces the rate of transformation of fertilizer compounds, resulting in extended time of availability in the soil. Examples of stabilizing amendments are nitrification inhibitors, nitrogen stabilizers, or urease inhibitors.

(4) The registrant shall provide the MFRS with a testing program that substantiates the claims of “slow release” or “stabilizing” characteristics made on the label. The testing program shall be conducted by a reputable researcher acceptable to the MFRS.

(5) A laboratory procedure acceptable to the MFRS for evaluating the release characteristics of the product(s) shall be provided by the registrant.

PART V

Final Provisions

Cooperation With Other Entities

24. The MFRS may cooperate with and enter into agreements with other agencies in Malawi in order to carry out the purpose and provisions of the Act and regulations enacted under the Act. The MFRS may also cooperate with and enter into agreements with other agencies of Malawi in order to carry out the purpose and provisions of other Acts and regulations that may have some relation to fertilizer production, distribution, and use.

Exchange Between Producers, Importers and Dealers

25. Nothing in these regulations shall be construed to restrict or avoid sales or exchanges of fertilizers to each other by producers, importers, or dealers or as preventing the free and unrestricted shipments of fertilizers to producers, importers, or dealers who are registered as required by provisions of the Act and regulations enacted under the Act.

Saving

26. (1) If any sentence, paragraph, or part of these regulations shall for any reason be judged invalid by any court of competent jurisdiction, such judgment shall not affect, impair, or invalidate the remainder thereof.

(2) Nothing in these regulations shall require the Commodity Team Leader for Fertilizer Services to report for prosecution for minor violations of these regulations whenever he believes that the public interest shall be adequately served by a suitable written notice of warning and compliance with such notice.

Contravention

27. Any disposition that contravenes these regulations is repealed.

Application of Regulations

28. The modality of application of these regulations when needed shall be fixed by the Minister.

SCHEDULE A

Investigational Allowances and Actual Values

1. A fertilizer shall be deemed deficient if the analysis of an official sample for any plant nutrient is below the guarantee by an amount exceeding the values in the following schedule.

Guaranteed Percent (%)	Nitrogen (N) Percent (%)	Available (P ₂ O ₅) Percent (%)	Phosphate	Potassium (K ₂ O) Percent (%)
04 or less	0.49	0.67		0.41
05	0.51	0.67		0.43
06	0.52	0.67		0.47
07	0.54	0.68		0.53
08	0.55	0.68		0.60
09	0.57	0.68		0.65
10	0.58	0.69		0.70
12	0.61	0.69		0.79
14	0.63	0.70		0.87
16	0.67	0.70		0.94
18	0.70	0.71		1.01
20	0.73	0.72		1.08
22	0.75	0.72		1.15
24	0.78	0.73		1.21
26	0.81	0.73		1.27
28	0.83	0.74		1.33
30	0.86	0.75		1.39
32 or more	0.88	0.76		1.44

For guarantees not listed, calculate the appropriate value by interpolation.

Plant nutrient values will be calculated on the basis of the price documented in the inspection report of the inspected lot.

2. A fertilizer shall also be deemed deficient if the actual value is less than ninety-eight (98%) percent of the guaranteed value. The actual value is calculated by comparing the value guaranteed with the value found. Plant nutrient values will be calculated on the basis of the price documented in the inspection report for the inspected lot.

3. Secondary and micronutrients shall be deemed deficient if the analysis of an official sample is below the guarantee by an amount exceeding the values in the following table.

<u>Element</u>	<u>Investigational Allowance</u>		
	<u>Percent (%)</u>		<u>Percent (%) of Guarantee</u>
Calcium	0.2	+	5
Magnesium	0.2	+	5
Sulfur	0.2	+	5
Boron	0.003	+	15
Cobalt	0.0001	+	30
Molybdenum	0.0001	+	30
Chlorine	0.005	+	10
Copper	0.005	+	10
Iron	0.005	+	10
Manganese	0.005	+	10
Sodium	0.005	+	10
Zinc	0.005	+	10

The maximum allowance when calculated in accordance with the above shall be 1%.

Plant nutrient values will be calculated on the basis of the price documented in the inspection report for the inspected lot.

SCHEDULE B

Penalties for Deviation From Guaranteed Analysis

A. Investigational Allowances—Penalty Rates

When a fertilizer fails to meet the guaranteed analysis of plant nutrient(s) according to the investigational allowance table in Schedule A, then the following penalties shall apply.

	<u>Deviation From Guaranteed Analysis</u>	<u>Penalty Adjustment</u>
(1)	When the deficiency of any nutrient guaranteed is not more than the Investigational Allowance (IA)	0
(2)	When the deficiency of any nutrient guaranteed is more than the IA but less than 2 x the IA	2
(3)	When the deficiency of any nutrient guaranteed is more than 2 x the IA	3

The above penalty adjustment will apply to each plant nutrient guaranteed. No allowance will be made for excess over guarantee of one plant nutrient to balance deficiency of another plant nutrient. Plant nutrient value will be calculated on the basis of the price documented in the inspection report for the inspected lot.

Examples of Penalty Compilation

1. Urea was guaranteed by the registrant as 46% N on a lot of one (1) tonne priced at 32,200 Kwacha per tonne. Upon analysis, the N content was found to be 45.0%, meaning there was a deficiency of 1.0% N (46.0 - 45.0). Penalty is computed as follows: 1.0 (deficiency) x 2 (penalty adjustment) x 700 Kwacha (plant nutrient value equals 32,200 Kwacha divided by 46) x 1 (number of tonnes) = 1,400 Kwacha (penalty).
2. A “D” compound (8-14-7-6.5S) fertilizer was guaranteed as 8% N, 14% P₂O₅, 7% K₂O, and 6.5% S on a lot of 10 tonnes priced at 38,000 Kwacha per tonne. Upon analysis, the plant nutrient contents were found to be 7.2% N, 12.5% P₂O₅, 7.5% K₂O, and 7.0% S, meaning there were deficiencies of 8.0 - 7.2 = 0.8% N and 14.0 - 12.5 = 1.5% P₂O₅. Although the K₂O and S exceeded guarantee, no allowance is made for this excess to balance the deficiencies in N and P₂O₅. Penalty is computed as follows: 0.8 (N deficiency) x 2 (penalty adjustment) x 1070 Kwacha [plant nutrient value equals 38,000 Kwacha divided by 35.5 (total plant nutrient units)] x 10 (number of tonnes) + 1.5 (P₂O₅ deficiency) x 3 (penalty adjustment) x 1070 Kwacha (plant nutrient value) x 10 (number of tonnes) = 65,270 Kwacha.
3. A 23-21-0 + 4S compound fertilizer was guaranteed as 23% N, 21% P₂O₅, and 4% S on a lot of 100 tonnes priced at 33,000 Kwacha per tonne. Upon analysis, the plant nutrient contents were found to be 23.2% N, 21.3% P₂O₅, and 3.0% S, meaning there was a deficiency of 4.0 - 3.0 = 1.0 S. A 4.0% guarantee of sulfur is deficient if the analysis is less than 3.6% (0.2% plus 5% of 4.0% = S). Penalty is computed as follows: 1.0 (deficiency) x 3 (penalty adjustment) x 687.5 Kwacha (plant nutrient value equals 33,000 Kwacha divided by 48) x 100 (number of tonnes) = 206,250 Kwacha.

B. Actual Value—Penalty Rates

When a fertilizer meets the guaranteed analysis of plant nutrients

according to the investigational allowances table in Schedule A, but fails to meet the Actual Value of 98% or more, then a penalty shall be assessed based on the difference between the plant nutrient value guaranteed and the plant nutrient value found.

Example of Penalty Computation

A 20-10-10 was guaranteed by the registrant as 20% N, 10% P₂O₅, and 10% K₂O on a lot of 50 tonnes priced at 35,000 Kwacha. Upon analysis, the plant nutrient contents were found to be 19.5% N, 9.4% P₂O₅, and 9.6% K₂O. None of the plant nutrient contents were below the investigational allowances according to the table in Schedule A. However, the Actual Value of the fertilizer was only 96.25% according to the following calculations –

- (a) Total guaranteed plant nutrient units = 40.0
(20% N + 10% P₂O₅ + 10% K₂O)
 - (b) Total found plant nutrient units = 38.5.
(19.5% N + 9.4% P₂O₅ + 9.6% K₂O)
 - (c) Actual Value = $38.5/40.0 \times 100 = 96.25\%$.
(Minimum acceptable = 98%)
 - (d) The value found/tonne = 33,687.5 Kwacha.
(35,000 Kwacha x 0.9625)
 - (e) Value of deficiency/tonne = 1,312.5 Kwacha.
(35,000 Kwacha – 33,687.5 Kwacha)
- (e) Penalty (1,312.5 Kwacha x 50 tonnes) = 65,625 Kwacha.
- C. When a fertilizer is subject to a penalty from both an Investigational Allowance deficiency and an Actual Value deficiency, only the larger penalty shall apply.

SCHEDULE C

Heavy Metal Limits for Fertilizer Products

<u>Metal</u>	ppm per 1% P ₂ O ₅	ppm per 1% micronutrients	milligrams or compost
<u>per kilogram of biosolids</u> <u>products—dry weight basis</u>			
Arsenic	13	112	
Cadmium	10	83	
Chromium	-	-	
Cobalt	3,100	23,000 ^a	
Copper	-	-	
Lead	61	463	
Mercury	1	6	
Molybdenum	42	300 ^a	
Nickel	250	1,900	
Selenium	26	180	
Zinc	420	2,900 ^a	

a. Only applies when not guaranteed.

To Use the Table:

Multiply the percent guaranteed P₂O₅ or sum of the guaranteed percentages of all micronutrients in each product by the value in the appropriate column in the table to obtain the maximum allowable concentration (ppm) of these metals. The minimum value for P₂O₅ utilized as a multiplier shall be 6.0. The minimum value for micronutrients utilized as a multiplier shall be 1. If a product contains both P₂O₅ and micronutrients multiply the guaranteed percent P₂O₅ by the value in the appropriate column and multiply the sum of the guaranteed percentages of the micronutrients by the value in the appropriate column. Utilize the higher sum of the two resulting values as the maximum allowable concentrations.

SCHEDULE D

Policy Statement on Environmental Issues Respecting the Application of Fertilizer

The Government of Malawi is concerned that future use of fertilizer does not undesirably affect our environment. When combined with best management practices, the Government believes that appropriate fertilizer application can improve the quality of the environment by:

1. Increasing the quality and quantity of biomass produced per hectare, which aids in stabilizing and protecting the soil from erosion.
2. Increasing production of food and fiber per hectare, thereby eliminating the necessity for producing crops on land unsuited for cultivation.
3. Increasing accumulation of soil nutrients in biomass, thereby minimizing percolation of soluble nutrients to groundwater.
4. Reducing the amount of forestland placed into cultivation as a result of improved yields.

The Government strongly encourages research efforts by various organizations that will provide information vital to the use of plant nutrients without adversely affecting the environment. The use of this information by agronomists and other advisors in an educational program and in making recommendations will surely provide for an adequate source of food while safeguarding the environment of Malawi.

The Government recognizes and endorses the following activities: -

1. The use of soil testing and plant tissue analysis scientifically correlated with fertilizer needs of specific soil, crop, and climate.
2. Protecting land resources against erosion losses through employment of best management practices.
3. Long-term research programs to quantify the effects of fertilizer on the environment under diverse combinations of soils, climate, crop, and management.