## DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

No. R

# FERTILIZERS, FARM FEEDS, AGRICULTURAL REMEDIES AND STOCK REMEDIES ACT, 1947 (ACT NO. 36 OF 1947)

## PROPOSED REGULATIONS RELATING TO FERTILIZERS

- I, Senzeni Zokwana, Minister of Agriculture, Forestry and Fisheries acting under section 23 of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947), hereby-
- (a) Make known that I intend to make regulation on fertilizers in the schedule, and
- (b) Invite interested institutions, organisations and persons to submit any objections to or representations concerning the proposed regulation in writing to the Registrar, Fertilizer, Farm Feeds, Agricultural Remedies and stock Remedies, Private Bag X 343, Pretoria,0001 within four weeks from date of publication hereof.

The above mentioned Proposed Regulation Relating to Fertilizers will be made available on DAFF website: <a href="www.daff.gov.za">www.daff.gov.za</a> for public viewing at the following address route: Branch Agricultural Production, Health & Food Safety Agriculture Inputs Control Gazette and notices press enter

#### MR. SENZENI ZOKWANA

Minister of Agriculture, Forestry and Fisheries

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#### PART I: GENERAL

#### **Definitions**

- 1. Words and phrases in these regulations shall have the meaning assigned hereto in the Act, and unless the context otherwise indicates -
- "Act" means the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947);
- "activity index (AI)" means the amount of cold water insoluble nitrogen (CWIN) which is soluble in hot water in a urea formaldehyde fertilizer and reflects the rate at which CWIN will become available:
- "agricultural liming material" means substances of which the calcium and magnesium compounds have the ability to reduce soil acidity and contain no harmful elements;
- "amorphous lime" means soft, porous liming materials originating mainly from secondary deposits (as opposed to crystalline, non-porous liming materials mainly of primary origin);
- "analysis certificate" means a certificate issued by independent laboratories, utilizing relevant analytical methods which are either ISO 17025 accredited or AgriLASA certified for, the relevant analysis, indicating the full chemical and/or physical composition for the particular fertilizer, as required by the Registrar;
- "application fee" means monies that, in terms of these regulations, are payable for the registration of fertilizers and the annual renewal of such registrations and also include monies payable for the mixing and sale of prescription mixtures;
- "Ash" means inorganic substances remaining after all the organic substances have been removed (loss on ignition);
- "blender" means a manufacturer or person who mixes registered fertilizers for sale or someone who mixes such fertilizers on prescription for someone. "Mixer" has the same meaning;
- "bulk blending" means the mixing of dry and liquid fertilizers;
- "bulk" means the packaging of a fertilizer other than in a sealed container;
- "calcite" means calcium carbonate as it occurs in nature, with a maximum of 9 g/kg magnesium and a minimum of 380 g/kg calcium;
- "calcium carbonate equivalent (CCE)" means the acid neutralizing ability of an agricultural liming material expressed as a percentage of the acid neutralising ability of pure calcium carbonate;
- "calcium carbonate" means the carbonate of calcium that contains 400 g/kg calcium;
- "calcium hydroxide" means the hydroxide of calcium that contains 530 g/kg calcium;
- "calcium oxide" means the oxide of calcium that contains 700 g/kg calcium;
- "chelate" means the product of a chemical reaction between a metal cation and a chelating agent in which the cation is in a normal oxidation state and is attached to the chelating agent through coordinate covalent bonds;
- "chelating agent" means a molecule having two or more sites which donate electron pairs to a central metal cation and is large enough to form a five or six membered ring structure such as EDTA (ethylenediaminetetraacetic acid), NTA (nitrilo-triacetic acid) and IDS (iminodisucconic acid);
- "chemically compounded fertilizer" means a substance which, without it being mixed with another substance, contains one or more of the plant nutrient nitrogen (N), phosphorus (P) or potassium (K), provided that the total plant nutrient content of such fertilizer should be at least 1/3 of the

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- nominal value of a similar pure fertilizer and that all macro-elements that it contains in registerable amounts may be registered;
- "complex" means the product of a chemical reaction between a metal cation and a complexing agent, such as metal ions with polyphosphates, lignin sulphate and ammonia;
- "complexing agent (sequestering agent)" means a molecule which reacts with a metal cation to form a product of sufficient stability that the cation does not undergo any of its typical reactions such as precipitation in basic solutions;
- "composite sample" means the combined incremental samples taken from the same sampled portion;
- "compost" means a stabilised, homogenous, fully decomposed substance of animal or plant origin to which no plant nutrients have been added and that is free of substances or elements that could be harmful to man, animal, plant or the environment;
- "container" means the packaging in which a measured amount of a fertilizer is offered for sale;
- "custom mix" means a mixture compiled on the written advice of a qualified person for a specific client and such mixture must be of registered raw materials mixed at the written request of a specific client. Prescription mixture shall have the same meaning;
- "dry matter basis" means, in the case of liming materials dried at  $105^{\circ}$ C to constant mass, provided that in the case of substances that react with carbon dioxide (CO<sub>2</sub>) the atmosphere in the oven be replaced with an inert gas such as nitrogen (N<sub>2</sub>);
- "dry sieving" means the lime samples screened dry on a sieve shaker according to SABS method;
- "enrich" means the addition of registered inorganic fertilizers to registered organic fertilizers in order to raise the plant nutrient content of the organic fertilizer, provided that the total N, P and K must be a minimum of 100 g/kg and "enriched" has the same meaning;
- "enriched organic fertilizer" means a mixture of registered organic fertilizer with registered inorganic fertilizer that contains a minimum of 330 g/kg organic fertilizer, excluding urea;
- 'fertilizer' means any substance which is intended or offered to be used for improving or maintaining the growth of plants or the productivity of the soil;
- "fertilizer group" means the category under which a particular fertilizer falls. Fertilizers are categorised as follows:
  - **Group 1** which is a fertilizer containing a total equal or greater than 100 g/kg of N, P or K or any combination thereof; **or**
  - **Group 2** which is a fertilizer containing a total of less than 100 g/kg of N, P or K or any combination thereof or any other recognised plant nutrient(s) in acceptable amounts as indicated in Tables 1 9 and 13 15;
  - **Group 3** which is a fertilizer containing natural or synthetic substance(s) or organism(s) that improve(s) or maintain(s) the growth or yield of plants or the physical, chemical or biological condition (fertility) of the soil; and "soil Improver" has the same meaning;
- "fertilizer mixture" means a physical mixture of two or more chemically compounded fertilizers or organic fertilizers that contain one or more of the plant nutrients nitrogen (N), phosphorus (P) and potassium (K) as indicated in the tables (Annexure A);
- "final samples" means a replicate representative part of the reduced sample or, where no intermediate reduction is required, the composite sample maybe regarded as identical sub-samples of the sampled portion;
- "fulvic acid" means the organic substances of composition which remain in solution when an aqueous, alkaline extract of organic matter or soil is acidified;
- "Guaranteed analysis" means the stated minimum and/or maximum nutrient value of a fertilizer;

- "granules" means products formed by layering or conglomeration under controlled conditions to form almost spherical particles;
- "guano" means the excrement of seabirds, as it occurs in nature:
- "house and garden fertilizer" means a fertilizer manufactured, recommended, packaged and offered for sale for use on pot plants and in home gardens and not intended for agricultural use;
- "humates" means salts of humic acids:
- "humic acid" means a mixture of dark-coloured substances of undefined composition extracted from soil with dilute alkali and precipitated by acidification to a pH of 1-2 as well as similar material in coal deposits and other organic matter;
- "invoice" means an accompanying letter, delivery note or weighbridge ticket, receipt note or receipt;
- "label" means any written, printed or graphic representation attached to a container of a fertilizer or produced on a container in any possible manner and which states the details required in terms of these regulations for the particular fertilizers and "labelled" has the same meaning;
- "low chloride" means a fertilizer mixture with the maximum chloride content as prescribed in regulation 30(2);
- "macro-element" means any of the elements nitrogen (N), phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg), and sulphur (S);
- "macro-pellet" means particle sizes that are noticeably larger than those of pellets;
- "magnesite" means magnesium carbonate, as it occurs in nature, that contains a maximum of 10 g/kg calcium and a minimum of 275 g/kg magnesium;
- "magnesitic" means magnesium carbonate that contains a minimum of 190 g/kg magnesium;
- "magnesium carbonate" means the carbonate of magnesium that contains 280 g/kg magnesium and no calcium;
- "magnesium hydroxide" means the hydroxide of magnesium that contains 410 g/kg magnesium and no calcium;
- "magnesium oxide" means the oxide of magnesium that contains 600 g/kg magnesium and no calcium:
- "manufacture" means make, compound, mix, formulate, process, package and label for purpose of sale and "manufacturing" or "manufacturing process" have a similar meaning;
- "micro-element" means any of the elements iron (Fe), zinc (Zn), copper (Cu), molybdenum (Mo), manganese (Mn), boron (B);
- "micro-pellet" means particle sizes that are noticeably smaller than those of pellets:
- "municipal compost" means the disinfected and stabilised organic fertilizer manufactured by the controlled decomposition of sorted and milled urban waste including fermentable industrial and commercial waste;
- "municipal waste" means any municipal compost that does not meet the requirements for compost given in these regulations: on the understanding that such waste must meet the minimum requirements for municipal waste as set out in the regulations for the registration of fertilizers:
- "manufacturer" means an individual or undertaking that manufactures or mixes fertilizers;
- "organic fertilizer" means a fertilizer manufactured from substances of animal or plant origin, or a mixture of such substances, and that is free of any substances that can be harmful to man, animal, plant or the environment containing at least 40 g/kg prescribed plant nutrients;
- "organic fertilizer mixture" means a mixture of registered organic fertilizers;

- "pellet" means elongated cylindrical particles formed from wet cylindrically extruded material, cut to the desired length and then dried. No more than 10% remain on a 4 mm sieve and no more than 10% pass through a 1 mm sieve: provided that 90% fall within the interval of 1 mm to 4 mm and provided that the sieve size on which 10% of the particles remain contains openings that are not more than three times larger than those of the sieve on which 95% of the particles remain; and "macro granule" has the same meaning:
- "pelleted" means the manufacture of a fertilizer in pellet form;
- "physical quality assurance" means a test carried out to evaluate the fineness of a liming material and the pellet size of chemically compounded fertilizers or mixtures;
- "plant nutrient" means an essential macro- or micro-element present in a fertilizer;
- "powder" means particle sizes that are noticeably smaller than those for micro-pellets;
- "qualified person" means a person registered as Professional Natural Scientist with the South African Council for Natural Scientific Professions.
- "reduced samples" means a representative part of the composite sample obtained from the latter by a process of reduction, reduced to a suitable size for final division;
- "registered name" means the name approved by the Registrar under which a fertilizer is registered and may be sold: provided that in the case of an organic fertilizer such name must reflect the main component of such fertilizer;
- "sampled portion" means an identified and specified quantity of a material constituting a unit and having characteristics presumed to be uniform;
- "sample splitter" means an apparatus designed to split a sample into two or more equal parts;
- "scoop" means a sampling instrument with which samples of fertilizers occurring in bulk can be taken;
- "sealed" means to close a container in such a visible manner with a mechanism that will break visibly the first time the container is opened;
- "sewage sludge" means the disinfected and stabilised organic fertilizer manufactured from the treatment of raw sewage sludge;
- "shell lime" means an agricultural liming material of which the calcium and magnesium carbonate originates exclusively from sea animals;
- "slags" mean a mixture of the silicates of calcium and magnesium obtained from the iron and steel industry that are capable of reducing soil acidity and that contain a minimum of 300 g/kg silicon oxide (SiO<sub>2</sub>);
- "slaked calcitic" means calcium hydroxide with a maximum of 43 g/kg magnesium and a minimum of 700 g/kg as hydroxide;
- "slaked dolomitic" means the hydroxide of calcium and magnesium with a minimum of 40 g/kg magnesium and a minimum of 700 g/kg hydroxide;
- "**slaked magnesitic**" means magnesium hydroxide with a maximum of 40 g/kg calcium and a minimum of 700 g/kg as hydroxide;
- "slaked" means the hydroxides of calcium and magnesium or a mixture thereof that contains at least 800 g/kg hydroxide;
- "slow release fertilizer" means a fertilizer containing a plant nutrient in a form which delays its availability for plant uptake and use after application, or which extends its availability to the plant significantly longer than a reference "rapidly available nutrient fertilizer" such as ammonium nitrate or urea, ammonium phosphate or potassium chloride and "controlled release fertilizer" has the same meaning;

- "solution" means a homogenous liquid containing the plant nutrients in true solution;
- "sterilisation installation" means an installation used for the sterilisation of substances derived from animals and destined for use as a fertilizer according to a process approved by the Registrar for this purpose;
- "suspension" means a liquid in which undissolved substances may be present;
- "tolerance" means the permitted deviation in the natural variation of the stated value of a fertilizer that occurs in manufacture, sampling and chemical analysis, where the deviation is expressed as a percentage of the stated value of the fertilizer;
- "trademark" means a mark to which the holder of the registration has the right, either as owner or a registered user thereof, to distinguish his fertilizer from that of any other manufacturer but excludes the registered name of a fertilizer as intended in these regulations;
- "total nutrients" means the total sum of the N-, P- and K-content of a fertilizer;
- "unslaked calcitic" means calcium oxide with a maximum of 43 g/kg magnesium and a minimum of 700 g/kg as oxides;
- "unslaked dolomitic" means the oxides of calcium and magnesium with a minimum of 43 g/kg magnesium and a minimum of 700 g/kg oxides;
- "unslaked magnesitic" means magnesium oxide with a maximum of 43 g/kg calcium and a minimum of 700 g/kg as oxides; and
- "unslaked" means the oxides of calcium and magnesium or mixtures thereof that contain a minimum of 800 g/kg oxides.

#### Registration

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2. (1) An application in terms of section 3(1) of the Act for registration of a fertilizer, must be made on a form available from the Registrar for the purpose, or a clearly legible facsimile thereof on good quality A4 size paper of the same colour as the form supplied by the Registrar.

#### Such application must -

- (a) be made by a person residing in the Republic of South Africa or, in the case of a legal person that legal person shall have a registered office in the Republic;
- (b) signed by an approved person;
- (c) be accompanied by the prescribed application fee;
- (d) be accompanied by two copies of a typed version of the details relating to the particular fertilizer that will be marked on the container in which it will be sold, or will be attached to the label of such container;
- (e) be accompanied by guaranteed analysis from independent laboratories, utilizing relevant analytical methods which are either ISO 17025 accredited or Agri Laboratory Association of Southern Africa (AgriLASA) certified for the product which was obtained in the current year of application for registration;
- (f) be accompanied by a certificate of analysis from independent laboratories, utilizing relevant analytical methods which are either ISO 17025 accredited or AgriLASA certified indicating maximum levels of potentially harmful elements permitted in fertilizer products as prescribed in table 12; and in case of sludge be accompanied by a certificate of analysis for microbial contaminants as prescribed in regulation 38 (1) (d);