

# REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE FERTILIZER AND PESTICIDE AUTHORITY

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February 14, 2020

MEMORANDUM CIRCULAR NO. 06

Series of 2020

TO

ALL CONCERNED

THIS OFFICE

SUBJECT

REITERATION OF MEMORANDUM CIRCULAR NO. 01, SERIES OF

1988

This is to reiterate the implementation of Memorandum Circular (MC) No. 01, series of 1998 re: Guidelines in the Enforcement of Quality Control Standards for fertilizer specifically Section II.1.d and 3.d on the inspection and accuracy of bag weights and conformity of shipments to packaging and marking requirements for imported and locally manufactured fertilizer respectively, with reference to the mass tolerance indicated in the Philippine National Standards (PNS) 98:1993 Section 7.2.

Attached is the MC No. 01 Series of 1988 and copy of the PNS 98:1993.

Please be guided accordingly.

**WILFREGO C. ROLDAN** Executive Director











# FERTILIZER AND PESTICIDE AUTHORITY

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Memorandum Circular No. 01 Series of 1988 Dated: Nay 3. 1988

Subject:

GUIDELINES IN THE ENFORCEMENT OF QUALITY CONTROL

STANDARDS FOR FERTILIZER

# I. LEGAL BASIS

Under Presidential Decree No. 1144, Section 6 II-7, the Fertilizer and Pesticide Authority is mandated

"To regulate and control the quality of the different grades of fertilizers and to set new grades when necessary."

# II. COVERAGE

- All imported and locally produced chemical fertilizers sold in the Philippines are subject to the provisions of this Memo Circular.
- 2. All imported and locally produced fertilizers sold in the Philippines should conform to the Philippine National Standards (PNS), when applicable, and/or requirements of the Fertilizer and Pesticide Authority (FPA) on matters relating to product specification, packaging and marking.
- 3. Enforcement of quality control standards on fertilizer shall be classified as follows:

# a. Handatory

Mandatory Enforcement shail apply to major imported and locally produced fertilizers which have been traditionally used for agricultural purposes in the Philippines, namely: Urea, Ammonium Sulphate, 16-20-0, 14-14-14, Muriate of Potash, Ammonium Chloride and DAP. The list of fertilizers under this category shall be expanded whenever deemed necessary.

# b. Selective

Selective Enforcement shall apply to all locally produced and imported fertilizers not covered by Mandatory Enforcement.

# II. PROCEDURES

- Mandatory Enforcement on Imported Fertilizers
  - a. Imports of fertilizers enumerated under Provision II3a of this Memo Circular should be accompanied by a Certificate of Analysis from the manufacturer.
  - b. The Certificate of Analysis should be presented to the FPA by, an importer upon applying for a Tax Exemption Certificate, in addition to the usual documents required.
  - In addition, quality control inspection of imported fertilizers shall also be done by the FPA on a spot basis, as follows:
    - i. Designated FFA field personnel shall gather fertilizer samples at either one or all of the following places: a) at the vessel, b) at the bagging site, or c) at the importer's warehouse. The importer shall be given prior notice if sampling is to be undertaken. Sampling shall be done in the presence of the importer or his designated representative.
    - ii. Samples shall be analyzed at any of the following accredited laboratories in Manila in accordance with the choice of the importer(s): PIPAC, NIST, Ostrea and SGS. Analysis shall be made of the samples nutrient content, moisture, particle size and, when applicable, biuret and ash.
    - iii. Analysis fee shall be borne by the importer. When there are two or more importers per shipment, the fee shall be borne equally by them. The schedule of analysis fees is attached as Annex 1. The analysis fee shall be paid by the importer(s) upon applying for the Tax Exemption Certificate.
    - iv. Results of analysis shall be made available to the importer immediately upon release by the laboratory.
  - d. The FPA shall likewise inspect accuracy of bag weights and conformity of shipments to packaging and marking requirements under the FNS. Minimum requirements on markings may be waived by the FPA provided the importer informs the FPA seven (7) days prior to shipment arrival and shall provide justification acceptable to FPA for such.
- 2. Mandatory Enforcement on Locally Manufactured Fertilizers (Granulated, Blended or Compacted)

- a. Local manufacturers of fertilizers enumerated under Provision II3a are required to submit to the FPA once every quarter, a Certificate of Analysis for each product formulation. The analysis shall include nutrient content, moisture, particle size and, when applicable, biuret and ash.
- b. In addition, quality control inspection of locally manufactured fertilizers shall also be done by the FPA on a spot basis, as follows:
  - i. Designated FPA field personnel shall gather fertilizer samples in either one or both of the following places: a) at port of discharge, or b) at manufacturer's warehouse. The manufacturer shall be given prior notice if sampling is to be undertaken. Sampling shall be done in the presence of the manufacturer or his designated representative.
  - ii. Samples shall be analyzed at any of the following accredited laboratories: PIPAC, NIST, Ostrea and SGS. Analysis shall be made of the samples' nutrient content, moisture, particle size and, when applicable, biuret and ash.
- c. The FPA shall likewise spot check accuracy of bag weights and conformity of stocks to packaging and marking requirements under the PNS. Minimum requirements on markings may be waived by the FPA provided the manufacturer gives prior notice to the FPA and shall provide justification acceptable to FPA for such.
- 3. Selective Enforcement on Locally Manufactured Fertilizers
  - a. Locally manufactured fertilizers not covered by Mandatory Enforcement shall be subject to the FPA's quality control inspection on a spot basis.
  - b. Designated FPA field personnel shall gather fertilizer samples at either one or both of the following places: a) at the port of discharge, or b) at manufacturers' warehouse. The manufacturer shall be given prior notice if samples are to be undertaken. Sampling shall be done in the presence of the manufacturer's designated representative.
  - c. Samples shall be analyzed at any of the following laboratories in Manila: PIPAC, NIST, Ostrea and SGS.
  - d. The FPA shall likewise inspect accuracy of weight of locally manufactured fertilizers and conformity to packaging and marking requirements under the PNS. Minimum requirements on markings may be waived by the FPA provided the manufacturer gives prior notice to

the FPA and shall provide justification acceptable to the FPA for such.

- 4. Selective Enforcement on Imported Fertilizers
  - a. Imported fertilizers not covered by Mandatory Enforcement are subject to quality control inspection by FPA on a spot basis.
  - b. Designated .FPA field personnel shall gather fertilizer samples at either one or all of the following places: a) at the vessel, b) at the bagging area, or c) at the importers' warehouse. Importer shall be given prior notice if samples are to be undertaken. Sampling shall be done in the presence of the importer or his designated representative.
  - c. Samples shall be analyzed at any of the following laboratories in accordance with the choice of the importer: PIPAC, NIST Ostrea and SGS.
  - d. Analysis fee shall be borne by the importer(s) and shall be paid upon applying for a Tax Exemption Certificate.
  - e. The FPA shall likewise check accuracy of weight and conformity to packaging and marking requirements of the FNS, when applicable. Minimum requirements on markings may be waived by the FPA provided the importer informs the FPA seven (7) days prior to shipment arrival and shall provide justification acceptable to FPA for such.
- 4. Selective Enforcement on Fertilizer Dealers and Distributors
  - a. Imported and locally manufactured fertilizers being sold by dealers and distributors will be subject to quality control inspection by the FFA on a spot basis.
  - b. Designated FFA field personnel shall gather fertilizer samples at dealers' and distributors' outlets and warehouses.
  - c. Samples shall be analyzed as to product specification and checked as to accuracy of weight and conformity to packaging and marking requirements.

# III. PENALTIES

Administrative sanctions shall be imposed against all persons or entities who shall violate or shall refuse to abide by the provisions of this Memo Circular. These sanctions shall include, but will not be limited to, the cancellation of

registration, revocation of license, refusal to issue Tax Exemption Certificate or to revoke/recall a Tax Exemption Certificate if already issued, and to impose such other sanctions that the FPA is empowered to do under its charter.

# IV. EFFECTIVITY

This Memorandum Circular shall be effective thirty (30) days from date of issuance.

UIS . VILLA REAL, JR.

/Administrator

#### Foreword

This Philippine National Standard Specification for Inorganic Solid Complex Fertilizer was prepared by the Bureau of Product Standards' Technical Committee on Fertilizers and Soil Conditioners, BPS/TC 15. This standard supersedes PNS 98:1986.

This revision specifies the moisture content of 2.0% maximum for both coated and uncoated inorganic solic complex fertilizer. This standard does not include monoammonium phosphate (MAP or 11-53-0), diammonium phosphate (DAP or 18-46-0) and ammonium phosphate sulfate (16-20-0-128) fertilizers. It specifies the nitrogen content for all complex fertilizer in the form of ammonia, nitrate or urea-nitrogen or any combination of the three.

The labelling clause was amended to comply with the requirements of R.A. 7394, Consumer Act of the Philippines. It also includes the phrase "For nitrate-based fertilizer" not recommended for crops under flooded or submerged soil conditions."

Packaging sizes of 25, 10, 5 and 1 kilograms with a mass tolerance of  $\pm$  0.4% were included.

In the preparation of this standard, the Official Method of Analysis of the Association of Official Analytical Chemists (AOAC) was considered.

Fertilizers - Inorganic Solid Complex Fertilizer - Specification

# 1 Scope

This standard specifies the requirements for inorganic solid complex fertilizer. This does not include monoammonium phosphate (MAP or 11-53-0), diammonium phosphate (DAP or 18-46-0) and ammonium phosphate sulfate (16-20-0-12S) which are covered by PNS 78.

#### 2 References

The standards publications referred to in this standard are listed in the inside back cover.

#### 3 Definitions

For the purpose of this standard, complex fertilizer is defined as any homogeneous product containing at least two principal or major plant food nutrients such as nitrogen, phosphorus and potassium except those covered by PNS 78. It may also contain secondary or trace elements.

#### 4 Requirements

- 4.1 Physical The fertilizer material shall be in the form of powder, granules, pellets, prills or crystals and shall be dry, free-flowing, and free from lumps, visible impurities and extraneous matter.
- 4.2 Chemical The composition of the fertilizer material with respect to its chemical plant food nutrients shall conform to the guaranteed analysis specified on the label of the packages. The nitrogen content for all complex fertilizer is in the form of ammonia, nitrate or urea-nitrogen or any combination of the three. Nitrate-based fertilizers are not recommended for crops under flooded or submerged soil conditions.
- 4.2.1 The permissible minimum tolerance from the guaranteed nutrient shall not be less than ninety eight (98) percent of each of the major nutrients.
- 4.2.2 Moisture Contents The moisture content shall not be more than 2.0% for both coated and uncoated.
- 4.2.3 pH The pH value of a ter percent aqueous solution of the material shall not be less than 5.0.

# 5 Sampling

The complex fertilizer shall be sampled in accordance to PNS 85.

### 6 Testing

Complex fertilizer shall be tested in accordance with the following:

- 6.1 Total Nitrogen
- 6.1.1 Ammoniacal Nitrogen
  - % Total Nitrogen PNS 896
- 6.1.2 Ammoniacal and Nitrate Nitrogen
  - % Total nitrogen PNS 927
  - % Ammonium nitrogen PNS 927 (skip reduction process)
  - % Nitrate nitrogen = % total nitrogen % ammonium nitrogen
- 6.1.3 Ammoniacal and Urea Nitrogen
  - % Total nitrogen PNS 895
  - % Nitrogen from Urea PNS 896
  - % Ammonium nitrogen = % total nitrogen % nitrogen from urea
- 6.2 Available P2O5 PNS 926
- 6.3 K20 PNS 93
- 6.4 Moisture Content PNS 86
- 6.5 Trace element Refer to Association of Official Analytical Chemists Methods of Analysis
- 7 Packaging
- 7.1 Material Complex fertilizer weighing more than 5 kg shall be packed in woven polypropylene sack that conforms to PNS 95, with polyethylene liner while those weighing 5 kg or less shall be packed in polyethylene bags with a minimum thickness of 0.025 mm to afford maximum protection from normal hazard of transportation and handling.
- 7.2 Sizes Complex fertilizer snall be packed into the following mass with a tolerance of  $\pm$  0.4% as shown below:

ass, kg	Tolerance, kg	
50	± 20,0°	. 2
25	±\1,00	. 1
10	± A0	.04
5	±/20	20
1	<i>±</i> 4	.004
		,

# 8 Marking and Labelling

The following information shall be legibly and indelibly printed/marked on the bag and shall conform to PNS 1033:

- 8.1 Name of material, trade name or brand name
- 8.2 FPA registration number
- 8.3 Chemical Composition
- 8.3.1 The percentage by mass of each of the plant nutrient/element (or their oxides) present. If the nutrient percentage is expressed in the conventional sequence  $N-P_2O_5-K_2O$  then they do not need to be named.
- 8.3.2 The form in which nitrogen is present.
- 8.3.3 The presence of trace elements with their corresponding chemical analysis. (Optional)
- 8.3.4 % moisture
- 8.4 Net mass, kg
- 8.5 Business name
- 8.6 Name and address of manufacturer, importer or repacker
- 8.7 Country of manufacture or country of origin, if imported
- 8.8 For nitrate-based fertilizer, the words "Not recommended for crops under flooded or submerged soil conditions".

# BUREAU OF PRODUCT STANDARDS Department of Trade and Industry

Technical Committee 15 - Fertilizers and Soil Conditioners

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## Co-Chairman

### Private Sector:

1 Antonio S. Rola Supreme Management of Agro-Resources and Trading Company

#### Members

# Government Agencies:

- Adelaida C. Cahanap Bureau of Plant Industry
- 4 Redemcion B. Grifal Bureau of Soils and Water Management
- 5 Julieta B. Lansangan Fertilizer and Pesticide Authority
- 6 Estrella G. Mamaril Industrial Technology Development Institute

# Technical Officer

11 Nilda B. Adao Jocelyn A. Espiritu Bureau of Product Standards

# \* Alternate

### Government:

2 Cirila S. Botor Bureau of Product Standards

#### Manufacturers:

- 7 Augusto R. Matias Philippine Phosphate Fertilizers Corporation
- 8 Edwin O. Bawagan Atlas Fertilizer
- 9 Jessie Sanico Sagana 100, Phils.

# Academe:

10 Arcelia A. Alejar UP Los Baños References PNS 98:1993

The following standards through reference in this text form part of this national standard. At the time of publication of this PNS, the editions indicated were valid.

PNS 926:1993, Fertilizer - Total Phosphorus (Spectrometric Molybdovanadate Method) - Method of Test

PNS 927:1992, Fertilizer - Ammoniacal and Nitrate Nitrogen (Modified Devarda Method) - Method of Test

PNS 93:1993, Fertilizer - Potassium (Volumetric Sodium Tetraphenylboron (STPB) Method - Method of Test

PNS 86:1993, Fertilizer - Moisture Content of Solid Fertilizer (Vacuum Oven Method) - Method of Test

PNS 85/Amd. 01:1992, Solid Fertilizer - Method of Sampling

PNS 1033:1993 - Fertilizer - Marking - Presentation and Declaration

PNS 95:1993, Packaging - Woven Polypropylene Bags for Solid Fertilizers - Specification