

Priemyselné a vápenaté hnojivá Odber vzoriek zo statických háld Technická správa o experimentálnych pokusoch na odbery vzoriek vykonaných na základe mandátu M/454

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Fertilizers and liming materials - Sampling of static heaps - Technical report on experimental sampling trials performed under mandate M/454

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Contents		Page		
Europ	European foreword5			
Introduction		6		
1	Scope	7		
2	Normative references	7		
3	Background			
3.1	General			
3.2	Requested tasks			
4	Experimental sampling studies	8		
4.1	General			
4.2	Sampling protocol			
4.2.1	Protocol			
4.2.2	Mass of the heap to be sampled			
4.2.3	Types of sampling			
4.3 4.3.1	Sampling instrumentsGeneral			
4.3.2	Suitable instruments for granulated fertilizers			
4.3.3	Suitable instruments for liming materials			
4.4	The 1st experimental trial (see A.1)			
4.5	The 2 nd experimental trial (see A.2)			
4.6	The 3 rd experimental trial (see A.3)	12		
5	Development of sampling protocols	12		
5.1	Simulation of sampling protocols			
5.2	Statistical analysis			
5.3	Discussion and conclusions			
5.3.1 5.3.2	GeneralBasic principle of sampling			
5.3.2 5.3.3	SegregationSegregation			
5.4	Scope of the experimental trials			
6	Conclusions			
Anne	x A (informative) Reports about the experimental trials			
A.1	The 1st experimental trial			
A.1.1	-			
A.1.2	Description of the site			
A.1.3	-			
A.1.3.	1 General			
A.1.3.	2 Conical heap	17		
A.1.3.	3 Rectangular heap	18		
	Sampling in the flow			
A.1.5	Sampling of the conical heap	19		

A.1.6	Sampling of the rectangular heap	21
A.1.7	Chemical analysis	21
A.1.8	Granulometric analysis	21
A.1.9	Conclusions of the 1st trial	21
A.2	The 2 nd experimental trial	23
A.2.1	General	23
A.2.2	Description of the site	23
A.2.3	Constitution of the conical and rectangular heaps	23
A.2.3.	1 General	23
A.2.3.	2 Conical heap	23
A.2.3.	3 Rectangular heap	24
A.2.4	Sampling in the flow	24
A.2.5	Sampling of the conical heap	25
A.2.6	Sampling of the rectangular heap	26
A.2.7	Chemical analysis	27
A.2.8	Granulometric analysis	27
A.2.9	Conclusions of the 2 nd trial	27
A.3	The 3 rd experimental trial	29
A.3.1	General	29
A.3.2	Description of the site	29
A.3.3	Constitution of the conical heap	30
A.3.4	Sample division	30
A.3.5	Sampling in the flow	30
A.3.6	Sampling of the conical heap	31
A.3.7	Chemical analysis	33
A.3.8	Granulometric analysis	33
A.3.9	Conclusions of the comparative analyses	34
Annex	B (informative) Literature review	36
B.1	Introduction	36
B.2	Inventory of standards	36
B.3	Inventory of best practice guidelines	36
B.4	Inventory of legislation	37
Annex	c C (informative) Sampling instruments - Equipment for static heap sampling	39
C.1	General	39
C.2	Manual spears	39
C.3	Monotube spear	39

TNI CEN/TR 17040: 2017

CEN/TR 17040:2017 (E)

C.4	Nobbe spear	39
C.5	Double tube spear	39
C.6	Test of manual spears	39
C.7	Consideration	41
3ibliography		42

European foreword

This document (CEN/TR 17040:2017) has been prepared by Technical Committee CEN/TC 260 "Fertilizers and liming materials", the secretariat of which is held by DIN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

Introduction

With mandate M/454 of October 2009 the EC asked the European Committee for Standardization (CEN) for a second extension to the standardization mandate M/335 concerning the modernization of the methods of analysis of fertilizers.

This extension concerns the framework of Regulation (EC) No 2003/2003 relating to fertilizers and liming materials [1].

The establishment of European Standards for methods of sampling and analysis is of utmost importance to guarantee a uniform application and control of the European legislation in all member states. Standardized methods of sampling and analysis are an indispensable element in guaranteeing a high level of quality and safety of EC fertilizers for the benefit of purchasers.

In order to avoid any improper use of the term EC-fertilizer Member States are required to check the compliance of such fertilizers or liming materials with the Regulation. To do this effectively, representative sampling is a prerequisite for reliable analytical results.

Within the framework of mandate M/335, CEN/TC 260 developed EN 1482-1 which applies only to the sampling of bulk material while it is being moved i.e. when any part of the fertilizer has an equal chance of being part of the incremental sample, and EN 1482-2 which specifies the sample preparation. In March 2009, a meeting of the Fertilizers Working Group of the EC took place to better define the current sampling practices in the different Member States. Two Member States recommended further improvements of EN 1482-1 as regards the sampling of static heaps.

Further enforcement authorities have limited resources for conformity assessment, and these are most efficiently deployed at the downstream end of the supply chain, i.e. at retailer or farmers premises. Therefore, nutrient content compliance should be ideally controlled at the point of sale to the end user, i.e. at the end of the supply chain. The fertilizer or liming material may be delivered or stored at this point in a bulk heap. Therefore EN 1482-1 might not fully satisfy the needs of Member States and an evaluation should be carried out by CEN to see whether a representative sample can be obtained from bulk heaps and if so what size of fertilizer heaps could be sampled at affordable costs.

Therefore mandate M/454 from the EC asked the European Committee for Standardization (CEN) to provide standardized methods for sampling static heaps.

In resolution BT C093/2009, the CEN Technical Board (BT) accepted mandate M/454 and allocated the work to CEN/TC 260, more specifically to its working group WG 1 "Sampling".

1 Scope

This document covers reports on three experimental sampling studies which have been performed under mandate M/454 in order to check the accuracy of the developed sampling method for sampling of static heaps by comparing it to the sampling of the same fertilizer product in motion according to EN 1482-1 and to determine which sizes of static fertilizer heap, if any, can be sampled using existing sampling equipment.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1482-1:2007, Fertilizers and liming materials — Sampling and sample preparation — Part 1: Sampling

EN 1482-3, Fertilizers and liming materials — Sampling and sample preparation — Part 3: Sampling of static heaps

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