

 GOVERNMENT OF DUBAI	<b>Organization/Unit:</b> إدارة مختبر دبي المركزي Dubai Central Laboratory Department	<b>الوحدة التنظيمية:</b> 	 بلدية دبي Dubai Municipality
	<b>Document Title:</b> Certification of Pulverized Fuel Ash as per BS 3892-1: 1997	<b>عنوان الوثيقة:</b> 	
	<b>Doc Ref.</b> DM-DCLD-RD-DP21-2121 (IC)	<b>رقم الوثيقة :</b> 	

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Issue Date	Rev. No.	Summary Of Amendments
10-12-2005	0	First draft for comments
23-01-2006	1	Issue for use
15-07-2009	2	Document reference number and format is changed according to the new IMS, statement for the independent testing plan was changed, and the statement for surveillance was shortened by referring to RD-DP21-2096 (IC).
25-03-2019	3	Updated format to new DM template and new DM logo
27-08-2020	4	Add the options for initial audit by the approved CAB and remotely by PCAS. Adding definition for authorized auditor. Update for the new numbering system and followed terminologies. Add provision for accepting valid test reports
26-09-2021	5	Removal of the documents in clause 2.1.2, in addition to further amendment in the provision for accepting valid test reports ( clause 2.4.2.3), in line with DM 30% reduction of requirements (both service and specialized). Modifications in the auditing part for the factories already certified against ISO 9001 to opt for auditing only the areas of production and monitoring stages of product realization, quality control and final product testing and evaluation.
07-10-2022	6	Changing section name as per the new organizational structure, and replace HOU by CQPSM (Section's Manager), also addition of surveillance in the clause 2.4.2.3
27-03-2023	7	Full re-structuring and transfer of common provisions to the general rule. Clauses are re-numbered and document title has been revised accordingly. Revision of clause 5.3

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## 1. INTRODUCTION

- 1.1 This document prescribes the specific rule for certification of the product(s) as identified herein, in accordance with the requirements of DM Third Party Product Certification Scheme Through Factory Assessment, taking into consideration the applicable normative references and standard specification, in addition to the requirements for conformity evaluation, as stated below.
- 1.2 The applicant/client shall comply with this specific rule, and to all provisions under the “**General Rule for DM Third Party Product Certification Scheme Through Factory Assessment**”**DM-DCLD-RD-DP21-2001 (IC)**.
- 1.3 This specific rule **is an integral part of the general rule** and both shall always be read together.

## 2. SCOPE

- 2.1 This specific rule specifies requirements for certifying the composition, production and chemical and physical properties of processed pulverized-fuel ash (PFA) for use as a cementitious component in combination with Portland Cement.
- 2.2 This specific rule does not -by itself- permit the use of the below product in the construction sites. However, it does provide the necessary general conformity assessment criteria, which are required for the evaluation and issuance of the certification and the authorization of the use of the DCLD Conformity Mark. Other relevant requirements issued by the regulatory bodies if any; shall always be fulfilled.

## 3 PRODUCT IDENTIFICATION AND APPLICABLE STANDARD/NORMATIVE REFERENCE

- 3.1 Product name: Pulverized-fuel Ash
- 3.2 Applicable standard/Normative reference: BS 3892: Part 1: 1997  
Part 1. Specification for pulverized-fuel ash for use with Portland cement.
- 3.3 Additional reference:  
ISO 9001 Quality Management System – Requirements  
ISO 19011 Guidelines for Auditing Management Systems  
BS EN 196-n Methods of testing cement

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#### 4 DEFINITION OF TERMS

4.1 In addition to the definitions given in BS 3892: Part 1 and the General Rule of the scheme [DM-DCLD-RD-DP21-2001 (IC)], the following shall apply:-

4.1.1 Standard Specification – BS 3892: Part 1: 1997

Part 1. Specification for pulverized-fuel ash for use with Portland cement.

#### 5 REQUIREMENTS FOR INITIAL CERTIFICATION

5.1 The process of application, initial assessment and product sampling shall be in line with the related provisions in the general rule and the standard specifications.

5.2 The factory shall have a laboratory with the following testing equipment as a minimum:

- Chemical Properties Analyzer
- Ventilated Electric Oven (capable of being controlled to 105 +/- 5 °C)
- Shallow Container (about 20 g capacity and can withstand 150 °C without loss in mass)
- Desiccators
- Sieve Frame (cylindrical with nominal dimensions of 50mm diameter and 75mm depth)
- Sieve Cloth (45 µm stainless steel mesh)
- Spray Nozzle
- Pressure Gauge (at least 160 kPa capacity with 5 kPa intervals)
- Weighing Scale (capable of weighing 100 g to the nearest 0.001 g)
- Compressive Strength Tester as required by BS EN 196-1:1995

5.3 Product Evaluation and testing

5.3.1 The test to be carried out in accordance with the Standard Specification (Clause 5 to 12) shall be as follows:

- 5.3.1.1 Moisture Content as per Annex C of BS 3892: Part 1: 1997
- 5.3.1.2 Fineness as per Annex D of BS 3892: Part 1:1997
- 5.3.1.3 Particle Density as per BS EN 196-6: 1992 of BS 3892: Part 1:1997
- 5.3.1.4 Water Requirement as per Clause 8 and tested as per Annex E of BS 3892: Part 1:1997
- 5.3.1.5 Strength Factor as per Annex F of BS 3892: Part 1:1997
- 5.3.1.6 Initial Setting Time as per BS EN 196-3:1995
- 5.3.1.7 Soundness as per BS EN 196-3:1995
- 5.3.1.8 Chemical Composition as per BS EN 196-2: 1995
- 5.3.1.9 Sulfuric Anhydride as per clause 8

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5.3.1.10 Loss on Ignition as per clause 7

5.3.1.11 Chloride as per clause 4

5.3.1.12 Calcium Oxide as per clause 13

5.3.2 The results of testing must meet the requirements as per the standard specification.

## 6 GRANTING OF THE DCLD CERTIFICATION

6.1 The DCLD product conformity certificate and the authorization to use the DCLD conformity mark shall be granted upon conformance with all related provisions in the general rule.

6.2 Fees shall be as per DM-DCLD-RD-DP21-2074 (IC) and other relevant provisions in the general rule.

6.3 DCLD-CQPS shall carry out surveillance of certified clients based on the approved periodic plans and related provisions in the general rule.

6.4 Appeals, disputes and complaints shall be in line with the relevant provisions in the General Rule.

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