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| GNB-CPD SG02 | Guidance from the Group of Notified Bodies for the Construction Products Directive 89/106/EEC | NB-CPD/SG02-06/019 Issued: 1 June 2006 APPROVED – GUIDANCE |
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GNB-CPD position paper from SG02 - EN 450-1:2005

Certification of fly ash for concrete

General scope, limitations and aim of this guidance for Notified Bodies (NBs)

This position paper contains guidance for Notified Bodies (NB) involved in the certification of fly ash for concrete according to EN 450-1:2005. The purpose is to help NBs work equivalently and come to common judgments. This guidance contains informative material (which NBs should or may follow) and normative guidance (which NBs shall follow or at least work equivalently to as circumstances demand).

This guidance is thought necessary to provide clarity and completeness for NBs so that they can work equivalently. It **supplements and makes practical for NBs** the harmonized standard EN 450-1:2005, approved AG guidance, and Standing Committee guidance in the form of GPs, which also apply - unless otherwise explicitly stated in this guidance. This position paper should **not** contradict nor extend the scope of the work and role of a NB, nor impose additional burdens on the manufacturer, beyond those laid down in the CPD and EN 450-1:2005.

This guidance should be considered valid until the relevant standards are amended to include the guidance (as thought fit by the CEN/TC); or until guidance from Commission, SCC, and AG has changed on relevant matters. Whereupon, the paper should be considered for withdrawal/revision and be replaced by new guidance as necessary.

This position paper was considered approved by SG02 and Advisory Group (AG) on 12 April 2006.

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1 Foreword

- 1.1.1 This document was prepared by Sector Group 02 of the Notified Bodies (NBs) working under the Construction Products Directive 89/106/EEC. It is intended to give guidance to notified bodies in preparing equivalent procedures in relation to the issue EC Certificate of Conformity to Annex ZA of EN 450 -1 on request of a manufacturer of fly ash.
- 1.1.2 This document is for guidance only, intended to provide equivalent and consistent actions by notified bodies involved in the field of certification of fly-ash. In all cases the relevant standard prevails.
- 1.1.3 It is underlined that the Manufacturer/Holder of the CE Marking is the only responsible for granting that fly ashes bearing the CE Marking have all the characteristics required by Annex ZA of EN 450-1.
- 1.1.4 To maintain equivalent use and interpretation of this document by the notified bodies it is important that any questions or remarks, or problems related to the use of this document, are communicated to the secretary of NB-CPD/SG02. In particular, the notified bodies are strongly invited to consider this request. The address of the secretary of SG02 can be found on the CIRCA website <http://www.forum.europa.eu.int/Public/circ/Home/main>

2 Scope and field of application

- 2.1.1 This document defines and describes the sequence of the main operational procedures to be followed by a Notified Certification Body in granting EC Certificate of Conformity for fly ash on the basis of the requirements of Annex ZA of EN 450-1.
- 2.1.2 EN 450-1 covers siliceous fly ash intended for use as a type II addition for the production of concrete including in particular cast-in-situ or prefabricated structural concrete conforming to EN 206-1. Fly ash according to EN 450-1 may also be used in mortars and grouts.

3 Reference list

- 3.1.1 Construction Products Directive 89/106/EEC
- 3.1.2 EN 450-1, Fly ash for concrete – Part 1: Definition, specifications and conformity criteria, including annex ZA
- 3.1.3 EN 450-2, Fly ash for concrete – Part 2: Conformity evaluation
- 3.1.4 Guidance Paper B – The definition of Factory Production Control in technical specifications for construction products
- 3.1.5 Guidance Paper D – CE Marking under the Construction Products Directive
- 3.1.6 Guidance Paper K – The attestation of conformity systems and the role and tasks of the notified bodies in the field of the Construction Products Directive
- 3.1.7 Position paper NB-CPD 01/ 002 – rev 4: Guidance on the participation of the notified bodies in the attestation of conformity under the Construction Products Directive 89/106/EEC

3.1.8 EN ISO 9001, for definitions only

4 Terminology

For those terms that are not included in the documents listed in clause 3 and for those that needed to be detailed, the definition is given below

4.1.1 Applicant

Manufacturer applying, directly or through his Authorized representative, for the EC Certificate of Conformity for fly ash produced in one factory.

4.1.2 Audit sample

Spot sample taken under the responsibility of the Notified Certification Body, at any time without prior notice, at the point(s) of release of fly ash from the factory and/or depot supplied with fly ash by the factory.

4.1.3 Authorized representative

Any natural or legal person, expressly designated by the manufacturer, to act on his behalf. The authorized representative must be established inside the EEA.

4.1.4 Brand name

A unique proprietary name owned and used by a manufacturer for a type of fly ash.

4.1.5 CIRCA

The European Commission Website dedicated to the Construct Products Directive related activities in which is contained all the information concerning the general co-ordination of the certification (Advisory Group NB-CPD) and the specific co-ordination (Sector Groups) in the frame of EC-mandates. Relevant information may be found at any time by consulting:

<http://forum.europa.eu.int/Members/irc/enterprise/cpdqnb/home>

4.1.6 EC Certificate of conformity

A Certificate which entitles the manufacturer to affix the CE Marking (see also Annex ZA of EN 450-1)

4.1.7 EC Certified fly ash

Fly ash for which an EC Certificate of Conformity has been issued

4.1.8 EC Declaration of conformity

Declaration by the manufacturer or its Authorized Representative in conformity with EN 450-1 annex ZA

4.1.9 Holder (of the EC Certificate of Conformity)

The Manufacturer is the holder of the EC Certificate of Conformity and the only one entitled to affix the CE marking

4.1.10 Inspector

Person appointed under the responsibility of the Notified Certification Body to perform the activities of inspection and/or audit sampling

5 EC fly ash certification process (for a New Factory)

5.1.1 The scheme to be followed by the Notified Certification Body to grant the EC Certificate (in the case of a New Factory) is divided into four main "operative phases". A further phase concerns continuous surveillance (see chapter 11).

| Scheme of reference for the EC fly ash certification process | |
|---|--|
| 1st | Starting/Application/Acceptance (see chapter 6): Application receipt/acceptance Acceptance of the application Examination of the received documents |
| 2nd | Initial Inspection of the factory and factory production control (see chapter 7): Assessment of the Work's quality manual Initial inspection of the Factory and Factory Production Control Initial inspection of the Laboratory of the Factory Report of the results of the initial inspection |
| 3rd | Initial Audit sampling/Type testing and issue of EC Certificate of Conformity (see chapter 8): Audit Sampling Testing of the first audit sample Evaluation of the results of the first audit sample Issue of the EC Certificate of Conformity and information to the manufacturer Additional identification of fly ash |
| 4th | Initial period (see chapter 9): Subsequent audit samples Testing of the subsequent audit samples Receiving testing results Evaluation of the auto-control results Evaluation of the subsequent audit samples results Decision that the EC Certificate of Conformity remains valid (and information to the Manufacturer) |

6 Starting / application / acceptance - 1st Phase

6.1 Application by the Manufacturer

- 6.1.1 Each application refers to fly ash, produced in one Factory
- 6.1.2 The application shall be addressed to a Notified Certification Body. As an example a format is given in Annex 1.
- 6.1.3 The application and the attached documents shall be submitted in a language previously agreed between the applicant and the Notified Certification Body.
- 6.1.4 The applicant must formally declare that no application has been sent for the same fly ash to any other Notified Certification Body.
- 6.1.5 The manufacturer has to request in which of the official language(s) of the EEA the first issue of the EC Certificate of Conformity has to be written.
- 6.1.6 In the case where the fly ash already bears a still valid EC Certificate of Conformity and the Manufacturer intends to change the Notified Certification Body and addresses a new application for the same fly ash, he should provide, as an annex, a copy of that EC Certificate. In this case, prior to issue the new EC Certificate of Conformity the Notified Certification Body has to ask the Applicant for the withdrawal of the previous certificate and have evidence of that.

6.2 Acceptance of the application

- 6.2.1 The application shall be verified and missing or corrected documents shall be requested.
- 6.2.2 The Notified Certification Body shall inform the applicant about the sub-contracted Bodies for the certification process.
- 6.2.3 The Notified Certification Body shall send the Applicant a formal confirmation of its acceptance or non-acceptance of the application. The non-acceptance shall be motivated.
- 6.2.4 Following the application acceptance, the Notified Certification Body shall send the Applicant a formal communication of the agreed dates of the Initial Inspection Visit.
- 6.2.5 The number of EC certificate of conformity can only be issued after the initial inspection of the factory, the assessment of FPC and the ITT has been performed positively.

6.3 Examination of the received documents

- 6.3.1 Before the initial Inspection of the Factory/F.P.C., the submitted documents, in particular the Works' Quality Manual, shall be examined on the basis of a check list prepared by the Notified Certification Body. The results of this examination should be reported to the Manufacturer prior to the Initial Inspection.
- 6.3.2 The Notified Certification Body shall verify that the list of quality documents covers, as a minimum, all the activities reported in the Works' Quality Manual.

7 Initial inspection of the factory and factory production control - 2nd Phase

- 7.1.1 During the Initial Inspection of the Factory, the Inspector should use a checklist, in addition to all of the relevant document listed in § 3, (see an example in annex 2).

7.2 Assessment of the quality documentation

- 7.2.1 During the Initial Inspection the Manufacturer shall make available to the Inspector the latest version of the Works' Quality Manual and of the related quality documents.
- 7.2.2 The Inspector shall verify that the Works' Quality Manual and related quality documents are correctly implemented and applied in compliance with EN 450-2.

7.3 Initial inspection of the factory and factory production control

- 7.3.1 The main actions to be taken are reported in EN 197-2 § 5.5.1, § 5.5.2, and § 5.5.3.
- 7.3.2 A unique identification of the fly ash/silos shall be available for sampling, control process and loading.
- 7.3.3 During the Initial Inspection, the first audit samples shall be taken.
- 7.3.4 The assessment of Depot(s) shall be included in the Initial Inspection.

7.4 Initial Inspection of the Laboratory of the Factory

- 7.4.1 The main actions to be taken are reported in the EN 197-2 § 5.5.4.
- 7.4.2 In the case where some auto-control tests are performed by an external laboratory as mentioned in the Works' Quality Manual, the Notified Body shall inspect this external laboratory to verify the records, the competency and the confidentiality at least once per year.

7.5 Report of the initial inspection

- 7.5.1 The main actions to be taken are reported in EN 450-2 § 5.5.5 and § 5.2.3.
- 7.5.2 At the end of the initial inspection, the Inspectors should draw up a Note showing observations, remarks and non-conformities, if any. This Note should be signed for reception by the Factory Representative who will also keep a copy.
- 7.5.3 The Notified Certification Body shall afterwards draw up an Inspection Report relating all the items which have been covered during the inspection and containing all the statements, observations, remarks and non conformities noticed during the Inspection, to be sent to the Manufacturer (contact person). In the case of non-conformities the Notified Certification Body shall ask the Manufacturer to resolve the problem, in established times.
- 7.5.4 The Manufacturer shall inform the Notified Certification Body about the Corrective Actions to be adopted and shall receive agreement from the Notified Certification Body. Results of corrective actions shall be recorded in compliance with the Works' Quality Manual.

8 Initial audit sampling/type testing and issue of EC certificate of conformity - 3rd Phase

8.1 Audit sampling

- 8.1.1 The main actions to be taken are reported in EN 450-2 § 5.4.1, § 5.4.2, § 5.4.4, and § 5.6.1.
- 8.1.2 In certain cases (e.g. need for visa of entrance in a certain country or where there may be logistical difficulties in reaching the Factory) it may be necessary to inform the Manufacturer. Any resolution decision can only be taken under the responsibility of the Notified Certification Body.
- 8.1.3 Any non-conformity in sampling operations shall be recorded on the sampling report. The data shall be checked by the Manufacturer's Representative who should countersign it.
- 8.1.4 The characteristics of the containers/envelopes and the arrangements for sealing these should be specified by the Notified Certification Body to the Manufacturer in advance.
- 8.1.5 It is recommended to maintain confidentiality about the origin of the samples.
- 8.1.6 The Notified Certification Body shall have a procedure for sampling.

8.2 Testing of the first audit sample

- 8.2.1 The actions to be taken are reported in EN 450-2 § 5.4.3 and § 5.4.4.

8.3 Evaluation of the results of the first audit sample

- 8.3.1 The main actions to be taken are reported in EN 197-2 § 5.6.2, § 5.6.3 and in the related “Guidelines for the application of EN 197-2”.
- 8.3.2 The Manufacturer shall inform the Notified Certification Body of the results of the testing on audit samples as soon as they are available.
- 8.3.3 The test results of the Testing Laboratory shall be sent to the Manufacturer only by the Notified Certification Body, and in any case always after the receipt of the correspondent internal test results.
- 8.3.4 At the end of the tests of the first audit sample the Notified Certification Body shall send a Test Report to the Manufacturer.
- 8.3.5 The test results of the testing laboratory and the manufacturer have to be equivalent (taking into consideration the reliability of the test method) and both must comply with the requirements of EN 450-1.
- 8.3.6 It is the responsibility of the Notified Certification Body to take immediate action in the case of doubts concerning the test results. In any case the Manufacturer shall be informed.

8.4 Issue of the EC Certificate of Conformity and information to the Manufacturer

- 8.4.1 Each EC Certificate of Conformity shall specifically refer to one fly ash produced in one specific Factory.
- 8.4.2 The Notified Certification Body shall issue the EC Certificate of Conformity after the positive results of the 2nd and 3rd phases and shall immediately inform the Applicant.
- 8.4.3 At this time, if some results of the auto-control for that fly ash are available, then they also can be compared with the requirements of EN 450-1 in order to make the conclusion of the Notified Certification Body as reliable as possible. In this case all available results of the auto-control should comply with the requirements of EN 450-1.
- 8.4.4 The Manufacturer should send a copy of its EC Declaration of Conformity to the Notified Certification Body for information.

9 Initial period - 4th Phase

9.1 Subsequent audit samples

- 9.1.1 The actions to be taken are reported in EN 450-2 § 4.3.1, § 5.4.1, and § 5.4.2.
- 9.1.2 In the case of Depot(s), the Notified Certification Body shall be informed in advance by the Manufacturer concerning the provisional quantity percentage of each fly ash directly to be sold by the Factory and/or by the Depot(s) in order to permit that the audit sample programme could be organised in compliance with the requirements of the related standards.
- 9.1.3 In this case, the Manufacturer’s auto-control sample programme could be organised in the same way and evidence of it could be given in the quality documents of the Factory.

9.2 Testing of the subsequent audit samples

9.2.1 The actions to be taken are reported in EN 450-2 clause 5.4.3.

9.3 Receiving testing results

9.3.1 The Manufacturer shall inform the Notified Certification Body of the results of the testing on audit samples and auto-control as soon as they are available.

9.3.2 The test results of the Testing Laboratory shall be sent to the Manufacturer only by the Notified Certification Body, and in any case always after the receipt of the correspondent internal test results and evaluation of their compliance and reliability.

9.4 Evaluation of the auto-control results & Evaluation of the subsequent audit samples results from the Initial Period

9.4.1 The actions to be taken are reported in EN 450-2 § 5.6.

9.4.2 It is in the responsibility of the Notified Certification Body to take immediate actions in the case of doubts concerning the test results. In any case the Manufacturer shall be informed about these actions.

9.5 Decision that the EC Certificate of Conformity remains valid (and information to the Manufacturer)

9.5.1 When the evaluation on the first initial period of auto-control results is confirmed, as well as the results of the external tests and all the aspects related to Factory Production Control, at the end of the initial period the Notified Certification Body should inform the Manufacturer of the confirmation of validity of the first issue of the EC Certificate of Conformity.

10 Maintaining the EC certificate of conformity

10.1.1 The scheme to be followed by the Notified Certification Body to maintain the validity of the EC Certificate is shown below.

Scheme of reference of EC Certificate of Conformity continuous surveillance, assessment and approval of Factory Production Control (see chapter 11)

1. Annual inspection to the factory, FPC and laboratory
2. Management of the non conformities/corrective actions following the Annual inspection to the factory, FPC and laboratory
3. Evaluation of the results of auto-control testing of samples
4. Management of the non conformities/corrective actions following the evaluation of the results of auto-control testing of samples
5. Audit samples results
6. Management of the non conformities/corrective actions following the evaluation of the results of audit testing
7. Annual decision that the EC Certificate of Conformity remains valid (and information to the Manufacturer)

11 Continuous surveillance, assessment and approval of factory production control

11.1 Annual inspection to the factory, FPC and laboratory

11.1.1 The actions to be taken are reported in EN 450-2 § 5.2.1, § 5.2.2, and § 5.2.3.

11.2 Management of the non conformities/corrective actions following the Annual inspection to the factory, FPC and laboratory

11.2.1 The actions to be taken are reported in EN 450-2 § 6.2.1.

11.3 Evaluation of the results of auto-control testing of samples

11.3.1 The actions to be taken are reported in EN 450-2 § 5.3.

11.4 Management of the non conformities/corrective actions following the evaluation of the results of auto-control testing of samples

11.4.1 The actions to be taken are reported in EN 450-2 § 6.2.1.

11.5 Audit samples results

11.5.1 The actions to be taken are reported in EN 450-2 § 5.4.5, and § 5.4.6.

11.6 Management of the non conformities/corrective actions following the evaluation of the results of audit testing

11.6.1 The actions to be taken are reported in EN 450-2 § 6.2.2.

11.7 Annual decision that the EC Certificate of Conformity remains valid (and information to the Manufacturer)

11.7.1 Yearly and in any case only if the statistical and last conformity evaluation on the previous twelve months period of auto-control results conforms, the Notified Certification Body may prepare a new original issue of the EC Certificate of Conformity, maintaining the same number.

11.7.2 This re-issue shall contain also the date of the first issue.

12 Quality records

12.1.1 The requirements for the manufacturer are reported in EN 450-2 § 4.1.4.2.

13 Format of the EC Certificate of Conformity

- 13.1.1 The format of the EC Certificate of Conformity reported in Annex 5 has been defined by the Commission for the product covered by the CPD with Attestation of Conformity System 1⁺.
- 13.1.2 The EC Certificate of Conformity shall have a unique number, which shall be allocated by the Notified Certification Body. The number is divided in three parts, separated by hyphens, as follows:
- the notification number of the Notified Certification Body (given by the Commission),
 - the acronym "CPD",
 - a unique reference number allocated by the Notified Certification Body for each individual fly ash, and for each individual factory if the product is marketed as being identifiably from a specific factory.
- 13.1.3 The unique reference number shall be composed of a number or an alpha-numeric combination consistent with the procedures of the Notified Certification Body.
- 13.1.4 The numbering criteria are considered equivalent among the NB-CPD-SG02 such that any possibility of repetition of the reference number allocated by the Notified Certification Body is avoided.

14 List of EC Certificates of Conformity

- 14.1.1 Each Notified Certification Body should maintain a list containing the valid EC Certificates of Conformity issued. This list shall be made available to market surveillance authorities upon request.

15 Proficiency tests

- 15.1.1 The main requirements to be taken are reported in EN 197-2 § 5.4.7.
- 15.1.2 The further development of proficiency testing requirements will be considered by SG02 following developments with the fly ash scheme in co-operation with CEN/TC 51.

Annex 1

APPLICATION FORM ^A FOR A EC CERTIFICATE OF CONFORMITY ON A FLY ASH, IN COMPLIANCE WITH ANNEX ZA OF EN 450-1

I the undersigned ^B, in my capacity as representative of ^C
.....,
with its Registered Office in ^D,
• as a Manufacturer, ^E
• as Authorised Representative established in the EEA, of the Manufacturer located in
^G

in compliance with Annex ZA of EN 450-1, apply, for the first time and only to this Notified
Certification Body, for the issue of a EC Certificate of Conformity for the fly ash mentioned below,
produced at the Factory of ^H,
with its Registered Office at ^I

- Having the relevant industrial property: ^L
 - Having been authorised by the Manufacturer to have the relevant industrial property: ^M
 - Standard designation of fly ash: ^N
- Brand name: ^O,
Additional information: ^P,
Additional identification: ^Q,
To be sold: ^R

This fly ash is sold under the direct responsibility:

- at the Factory mentioned above,
- and at external Depot(s) listed in attached document.

The sale is seasonal, from, to of the year.

It is particularly declared that:

- the Factory above and its Factory Production Control System complies with EN 450-2
- the above fly ash conforms with all requirements stated by the Annex ZA of the EN 450-1
- the fly ash in question has not yet any valid EC Certificate of conformity
- the Factory in question is not producing any other fly ash with a valid EC Certificate of Conformity

In addition I declare I have read the current rules and conditions of this Notified Certification Body for the EC Conformity Certification to Annex ZA of EN 450-1 of fly ash and fully accept all the provisions.

I authorise the access of the Inspectors appointed by the Notified Certification Body to carry out the required external audit sampling without any prior notice.

The following documents are attached in support of this application:

1. Works' Quality Manual
2. List of related quality documents
3. List of external Depot(s), their location(s) and principal contact name(s)
4. Acceptance of the rules and conditions as defined by the Notified Certification Body
5. Others ^S

In compliance with EN 450-2 I authorise the Notified Certification Body to use the data provided, in order to manage the procedures related to the activity in question (also by computerised systems).

I also authorise that all correspondence of the Notified Certification Body concerning this matter is to be addressed to the Contact Person.....

Place, Date

Signature

-
- A The Application shall be drawn up by the Manufacturer or by his Authorised Representative established in the EEA and it shall be written on headed paper.
One Application Form is needed for each fly ash, for each Factory.
The Application shall be presented in one original, written in a Language previously accepted by the receiving Notified Certification Body.
 - B Name and surname of Applicant appointed by the Manufacturer.
 - C Acronym and full name of the Applicant and relevant business name.
 - D Full address.
 - E If applicable.
 - F If applicable.
 - G Name of the extra Country.
 - H Name of the Factory, full address, phone and fax numbers and e-mail address of the Factory.
 - I If applicable.
 - L If applicable.
 - M If applicable.
 - N Type according to EN 450-1.
 - O If applicable.
 - P If applicable.
 - Q If applicable.
 - R Country in which will be marketed.
 - S *Any other needed or applicable document.*

Annex 2

EXAMPLE OF A REFERENCE CHECKLIST

(the corresponding reference clause § of EN 450-1 or EN450-2 is given in parenthesis)

A - GENERAL REQUIREMENTS (4.1)

1 Works' Quality Manual (4.1.2)

Does the Factory have a controlled copy of the Works' Quality Manual?

Is the year of the first issue of the Works' Quality Manual recorded?

Is there a distribution list of the Works' Quality Manual and related quality documents?

Is there evidence of receipt of the copies (controlled or not) of the Works' Quality Manual (and related quality documents) by the persons indicated in the distribution list?

2 Management system (4.1.3)

Does the Works' Quality Manual show the organisation structure?

3 Quality policy statement (4.1.3.1)

Does the Works' Quality Manual show the quality objectives of the Manufacturer/Factory?

Are there defined responsibilities concerning quality?

Are the resources required to reach and maintain the quality objectives available?

4 Management representative (4.1.3.2)

Is there an appointed management Representative?

5 Internal audit and management review (4.1.3.3)

Is there any list of persons charged with internal audit?

Are the members of this list independent of the area to be audited?

6 Training (4.1.3.4)

Is there evidence of the competence of the personnel involved in the quality production/control process?

Have personnel been identified who can affect internal and product quality, and are there adequate records of their competence/ experience and/or training?

Is there a defined programme for the training of the personnel involved in the quality production/control process?

Are there personal sheets/files for recording the experience/training of each person involved in the quality production/control process?

7 Document control (4.1.4.1)

Does a control ensure that the appropriate issue of all documents are available at essential locations?

Does a control ensure that the changes or modifications to any document are effectively introduced?

Has a master list been established to identify the current version of documents in order to prevent the use of non - applicable documents?

8 Quality records (4.1.4.2)

Are the Factory Production records retained for a minimum identified period?

Is this period adequate?

Is there suitable back-up for electronic records?

B - Internal quality control (4.2)

1 Process control (4.2.1 and 4.2.1.1)

Are the steps of the production process described in a flow chart?

Are targets and control limits defined for each production step?

Are corrective measures set if control limits are overcome?

Are there procedures for controlled proportioning of the fly ashes to achieve required target properties?

What are the method and frequencies adopted to collect process control data? Are these methods made available to the Factory managers?

Are there procedures intended to avoid contamination:

- of fly ash? (through separate, adequate storing facilities)
- during production, handling and in point of dispatching?

Are there silos for stocking products in bulk before dispatch?

2 Provisions for processing plants (4.2.1.2)

Are there procedures to ensure each consignment of incoming fly ash is documented and controlled as required in 4.2.1.2?

Are there procedures for the controlled processing of the fly ash?

3 Provisions for co-combustion production

Where co-combustion materials are used:

Are there procedures to ensure separate storage of different co-combustion materials?

Are there procedures to ensure the proportions of co-combustion materials related to pulverised coal used in the boiler are controlled at regular intervals?

4 Control of off-specification production (4.2.1.4)

Are there procedures for controlling the fly ash produced that does not comply with the control limits set by the manufacturer?

Are there procedure aimed at avoiding the dispatch of a fly ash that proves to be non complying with the specifications provided in EN 450-1?

5 Measuring and testing (4.2.2)

Do the Quality Documents define the equipment required for control and test activities during production?

6 Inspection, measuring and test equipment (4.2.2.1)

Are there procedures to control and calibrate the test equipment used during production?

Are there records of the control and calibration of the test equipment used during production?

Is there an inspection/testing plan for all the steps of the production process?

7 Handling, storage, packaging and delivery (4.2.3)

Are there procedures for assuring that the fly ash conveyed inside the works to the silo is not contaminated?

Are there procedures for assuring that the fly ash conveyed inside the depots from the unloading point to the silo is not contaminated?

Is the fly ash contained in each silo of the Factory unequivocally and clearly identified, in conformity with the complete "name" that will appear on the EC Certificate of Conformity?

For the external Depot(s) only, if applicable: Is the fly ash contained in each silo of the Depot unequivocally and clearly identified, in conformity with the complete "name" that will appear on the EC Certificate of Conformity and also with the identification of the Factory in which it was produced?

Is there a diagram showing handling and feeding lines to the silos, deviations, dispatching and sampling points?

Are there procedures aimed at ensuring that the loaded fly ash complies with the customer's specifications?

Does the Works' Quality Manual contain the list of the Depots of the Factory?

Have the weighing machines at the gate been approved and certified?

C - Auto-control testing of samples (4.3)

1 Sampling and testing (4.3.1)

Is there a procedure describing the auto-control plan for each fly ash?

Do these controls and tests frequencies comply with the requirement of EN 450-1?

For those ashes sold discontinuously are the test frequencies and sampling points specified in the Works' Quality Manual and agreed with the Notified Certification Body?

Is the sampling plan in proportion to the production of bulk fly ash and production from depots according to the relevant sale quantities?

Is auto-control data transmitted to the Certification Body in due time?

Do the test procedures comply with the test methods given in EN 450-1?

For which tests does the fly ash Factory use an external laboratory? Is this recorded in the Works' Quality Manual?

Has the manufacturer agreed for inspections of the external laboratory by the Notified Certification Body?

Is the procedure for determining the fly ash composition reported in the quality documents?

Are the registers containing the auto-control data correctly completed, updated and made available?

Are working/technical instructions for the repetition of eventual failed test results available?

Are there instructions for repeating tests which have failed? Are the above recorded?

What is the frequency of the statistical assessment according to the criteria provided in EN 450-1?

Are records concerning the auto-control data retained for at least 10 years?

2 Corrective actions (4.3.2)

Does the Works' Quality Manual provide corrective actions procedures to be carried out in order to eliminate the causes of non-compliance?

In case of non-compliance with the single results limit values conformity criteria, does the Works' Quality Manual provide a procedure for a review of the factory production control?

In such cases, is the Notified Certification Body informed?

In case of non-compliance of a sample taken at the delivery point:

- has the manufacturer determined the quantity of non-complying materials?
- has the manufacturer taken all the necessary precautions to avoid dispatch of the product?
- has the manufacturer informed the customers that they could have been given non-complying fly ash?

Are the corrective measures taken due to a non-compliance recorded and traceable?

Is the efficacy of the corrective measures controlled and recorded?

3 Measuring and test equipment for auto-control testing (4.3.3)

Is there a list of the measuring equipment used for auto-control tests?

Is there a procedure for controlling and calibrating the test equipment?

Control and calibration procedures include:

- equipment identification?
- equipment supplier and model?
- location of the equipment?
- control frequency?
- control method?
- approval criteria?
- reference samples/instruments?
- measures to be taken in case the results of the control/calibration are not satisfactory?

Each equipment is identified by a label reporting:

- date of the last and next control/calibrations?
- authorised signature?

Is non-calibrated equipment identified with a label indicating that it is out of service?

4 Quality records (4.3.4)

Are autocontrol results recorded and traceable?

Is the documentation relevant to the control and calibration of test equipment recorded and traceable?

Does the Works' Quality Manual show that autocontrol results and control/calibration documentation are kept for at least 10 years?

ANNEX 3

Logo of the Notified
Certification Body

<Name and address of the Notified Certification Body>

CERTIFICATE OF CONFORMITY

XXXX - CPD - YYYY

In application of article <X> of the <Law converting the CPD in national Law> relative to the application of the Directive 89/106/EEC of the Council of European Communities of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to the construction products (Construction Products Directive - CPD), and of articles <Y> to <Z> of the <(eventually) application Decree of the national Law> relative to the construction products, it has been stated that the construction product

<PRODUCT>

produced by the manufacturer

<Name of the producer>

<Full address>

in the factory

<Factory address>

is submitted by the manufacturer to a factory production control and to the further testing of samples taken at the factory in accordance with a prescribed test plan and that the approved body - <Name of the certification body> – has performed the initial type-testing of the product, the initial inspection of the factory and of the factory production control and performs the continuous surveillance, assessment and approval of the factory production control and ~~an~~ audit-testing of samples taken at the factory.

This certificate attests that all provisions concerning the attestation of conformity described in Annex ZA of the standard <EN 450-1:2005> were applied and that the product fulfils all of the minimum prescribed requirements.

<City, Date>

<Authorised signature>