

**Consultation Questions on the Quality Protocol  
for the production of pulverised fuel ash (PFA) and furnace bottom ash (FBA)  
for use in construction and manufacturing.**

**General**

1. Do you have any general comments on the Quality Protocol?

**Section 1.5.1 – Updating the Quality Protocol**

2. The review date set allows 18 months for the Quality Protocol to be implemented following the notification to the Technical Standards and Regulations Directive 98/34/EC. Are the dates for review realistic? If not, please suggest alternatives.

**Section 2.3 – Input materials**

3. The risk of PFA and FBA was assessed using typical composition data from the UK. We suggest that if maximum values are exceeded the material should be deemed to be waste. Do you agree?

**Section 3.1 – Evidence of compliance**

4. We propose the processors monitor their own compliance through testing, quality assurance or if desired voluntary independent auditing. Is this sufficient to ensure compliance? If not, what additional measures would you suggest?

**Section 3.2 – Records management**

5. Keeping these records will put in place an audit trail to show that PFA and FBA are being produced and sold for use in accordance with the Protocol's requirements. Do you agree that processors should keep these records? If not, who should?
6. Do you think that giving supply documentation to customers will ensure the products are the right quality? If not, what other measures should be put in place?
7. The success of the Quality Protocol relies on accurate and comprehensive record-keeping. Are the records identified in the Protocol sufficient? If not, what additional records should be made and retained?
8. Should a model quality statement or standard templates for the supply documents be included in the Quality Protocol? If so, can you provide suitable examples?
9. The Quality Protocol specifies that records should be maintained by the producer for a minimum of two years. Is this reasonable? If not, what length of time is appropriate?

## **Section 4.1 – Designated applications**

10. The risk of using PFA and FBA in these applications has been assessed. Are there any additional applications that we should consider? If so, please provide data on the potential risk to human health and the environment.

## **Appendix A – Definitions**

11. Are the definitions adequate to ensure the Quality Protocol is understood? If not, what other definitions are needed?

## **Appendix C – Standards and specifications**

12. The Quality Protocol requires producers to test products from PFA and FBA against existing standards and specifications. Are there any other standards we should consider?
13. We have been unable to source publicly available standards for applications listed as 'other uses' (35 and 36) in Appendix C. Are you aware of any standards available in the public domain? If so, can you provide examples?
14. Do you think that customer specifications for the 'other uses' (35 and 36) are sufficient to ensure quality and prevent misuse?

## **Appendix D – Good practice for the use of PFA and FBA**

15. We consider that the BRE and UKQAA codes of practice would benefit from being updated to reflect current water quality protection measures, in line with the additional measures set out in the protocol. Do you agree?
16. The additional good practice measures have been derived by modelling existing compositional data. Do you think the measures are reasonable? If not, why not?
17. Would you like further test data to be collected in order to inform a review of the good practice measures? If so, how could this work be funded?
18. A study of the effects of environmental weathering during storage on the dilution of chemical substances and other metals could also be undertaken. Would this be desirable? If so, how could this work be funded?
19. A study on the pozzolanic effects which would tend to limit permeability and leachate generation could also be undertaken. Would this be desirable? If so, how could this work be funded?

## **Financial Impact Assessment (FIA)**

20. Do you think that all the important costs and benefits are taken into account? If not, which are missing?

21. The analysis assumes that the operational costs to PFA producers of meeting the Quality Protocol are zero or at most minimal. Do you agree with this? If not, can you give an indication of the likely cost?
22. Do you have any other comments on the FIA and the approach used for the analysis?