



Mr. Rajesh Kumar Sethi
Chair, CDM Executive Board

UNFCCC Secretariat
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14/07/2008

Re: Request for review of the request for issuance for the CDM project activity “Partial substitution of fossil fuels with biomass in cement manufacture” (0844)

Dear Mr. Sethi,

SGS has been informed that the request for issuance for the CDM project activity “Partial substitution of fossil fuels with biomass in cement manufacture ” (0844) is under consideration for review because four requests for review have been received from members of the Board.

The requests for review are based on the reason as outlined below. Through this letter we would like to comment on the reason for review and provide additional information.

The concern in Requests states:

The heating values of rice husks and fossil fuel used were reported annually, however the monitoring methodology requires monthly measurement and calculation of these parameters. Clarification is required how the requirement is being met and how the impact of using yearly value has been assessed in the calculation of emission reductions.

SGS response:

As indicated in the table on page 14 of ACM0003 version 4 for the parameter No 3, heat value of the alternative fuel (HV_{AF}), and in the table on page 17 for the parameter No 9, heat value of the fossil fuel (HV_{FF}), both parameter have monthly recording frequency. Please refer to the registered PDD version 3 (dated August 2007), in section B.7 page 50 in the table for the parameter Rice Husk heat value and on page 54 in the table for the parameter Fuel Oil Heating value, under description of measurement methods and procedures to be applied, where the following is stated: that the parameter is determined in external assay labs using samples taken on-site on a monthly frequency 100% monitored as indicated by ACM0003 v4.

Related to the “Frequency of Calorific Values Measurement”: As stated in ISO9001 “*Inspection and Assessment Procedure*” shown to the DOE Verification Team during the site visit, when the plant is in operation, the calorific values are assessed monthly for all fuels consumed, except in the case of pet coke which is analyzed by an independent laboratory through a pool sample representing a whole batch, extracted during barge unloading process in accordance with international sampling and measurement standards (**). Pet coke batch are completely consumed in the term of one year. Nonetheless, every two months calorific values are measured over pool samples (composed by 60 daily individual samples) to check eventual meaningful deviations from bulk average value measured during barge unloading.

Impact of Using Yearly Values: Calorific values are then corrected by moisture content and made available in the plant’s ERP for production, cost and emission reduction ratio calculations. According to ISO9001 registers shown to the DOE Verification Team, standard deviation and variability coefficient of calorific values are very low along a year term (see table I) and they are within sampling and measurement method error. Besides, consumption of main fuel or rice husks is very stable with respect to thermal substitution. Considering these facts, no meaningful error arises from calculating emission reductions using year averages for calorific values.

Standard deviation on calorific values (kcal/kg)				
Year	Rice Husks	Fuel Oil	Pet coke (within a batch)	Calorimetric Method Error, kcal/kg (*)
2002	2,1	21,0	-	143
2003	2,8		-	143
2004	3,5		22,4	143
2005	2,2		47,8	143
2006	2,5		13,8	143
2007	2,6		61,3	143
2008	2,1		67,6	143

(*)- According to measurement reports from *Chemistry Faculty of University of the Oriental Republic of Uruguay*. (*Facultad de Química de la Universidad de la República Oriental del Uruguay*)

Table I, Main Fuels calorific values standard deviations

According to data in table I, applying a confidence level of two sigma (95% of samples), there is no error increment in emission reduction calculations when using year average calorific values instead of monthly average values. For higher confidence levels, error propagation is negligible.

Regarding the frequency of the Rice Husk and Fossil Fuel Heat Value, during the site visit it was checked that these values are assessed monthly for all fuels consumed, except in the case of pet coke which is analyzed by an independent laboratory through a pool sample representing a whole batch, extracted during barge unloading process in accordance with international sampling and measurement standards, pet coke batch are completely consumed in the term of one year by the cement plant; nonetheless, every two months calorific values are measured over pool samples (composed by 60 daily individual samples) to check eventual meaningful deviations from bulk average value measured during barge unloading. With reference to the impact of using yearly values, due to the confidence level of two sigma applied, there is no error increment in emission reduction calculations when using year average calorific values instead of monthly average values. For higher confidence levels, error propagation is negligible. Therefore we can confirm that the above mentioned is in line with the approved methodology ACM0003 v4 and the registered PDD v3 dated August 2007.

We hope that this letter addresses the concern of the Board. If further information is required, Emilio Doens (Emilio.Doens@sgs.com; +507 317 0828) will be the contact person for the review process and is available to address questions from the Board during the consideration of the review if necessary.

Yours sincerely,

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