

Mr. Sethi Chair, CDM Executive Board

UNFCCC Secretariat CDMinfo@unfccc.int

19th March 2008

Re: Request for review of the request for issuance of certified emission reductions for the CDM project activity "Lawley Fuel Switch Project, South Africa" (0177) for the monitoring period 1 Jan 2006 – 31 December 2006

Dear Mr. Sethi,

SGS has been informed that the request for issuance of certified emission reductions for the CDM project "Lawley Fuel Switch Project, South Africa" (0177) for the monitoring period 1 January 2006 – 31 December 2006 has received three requests for review from members of the Board.

The requests for review are based on the identical reasons as outlined below. SGS would like to respond to the issues raised:

Requests for Review dated 5 & 6 March 2008:

"The plant expanded the annual brick output from 73 million to 92 million in this monitoring period and the PP claimed the emission reductions only for the baseline output of 73 million bricks by using a production conversion factor. However, the methodology requires that the project activity does not increase the capacity of final outputs. However:

- 1. Further clarification is required on how the DOE verified that the monitoring report is in line with the methodology and how it verified the conservativeness of the project emissions associated with this approach.
- 2. Substantiated clarification of the PP and DOE is required on the impact of the higher production rate on the conclusions on the additionality of the project activity, if this higher production rate was assumed at the moment of registration of the project activity".

SGS Response to 1:

Please refer to the following information stated on page 17 of the registered PDD:

"The maximum potential firing capacity of the Lawley 50 chamber Transverse arch (TVA) kiln, before and after the fuel switch was 98 million bricks/annum (Gross output).

The constraint to increasing the then production output of 72 million bricks/annum (Gross), before and after the fuel switch, was the then installed drying capacity of the plant comprising some 19 chamber dryers.



The construction sector in South Africa is currently in the midst of a boom period with demand for clay bricks escalating.

Therefore Corobrik decided to increase the output of the Lawley plant in order to meet this demand. This was achieved by increasing the drying capacity of the plant by 6 more dryers. The new dryers were commissioned 6 months after the fuel switch (June 2005). The overall capacity of the plant remained unchanged since the TVA kiln remained unchanged. Due to the increase in drying capacity of the plant the annual brick output was increased from 73 million/annum to 80 million/annum for 2005 and to 92 million/annum for 2006. The increased output was only related to increased demand in the market and not to the fuel source used and could have been met by Lawley still operating on coal.

It is important to note that the baseline used is static (73 million/annum) and does not increase over time. In the project case only the amount of fuel used and therefore the emissions relating to the production of 73 million/annum and not 92million/annum will be used. The static baseline is in line with the overall conservative approach followed in the application of the methodology."

AM008 "Industrial fuel switching from coal and petroleum fuels to natural gas without extension of capacity and lifetime of the facility ' states as 4th applicability criterion:

"The project activity does not increase the capacity of final outputs and lifetime of the existing facility during the crediting period (i.e. this methodology is applicable up to the end of the lifetime of existing facility if shorter than crediting period)".

Regarding capacity of the final output of the facility:

- The capacity of the facility is ultimately linked to the kiln size, limiting output to 98 million bricks per annum (gross). This has remained constant before and after the fuel switch.
- The actual output fluctuates depending on market demand and is catered for through adjustments of the number of drying chambers, number of shifts and workflow optimization.
- Due to market demand the output of the brick factory did increase from 73 million bricks to 80 million bricks per annum for 2005 and to 92 million bricks per annum for 2006. This increase is not related to the project activity as has been stated at the time of validation and as described in the PDD.
- The number of drying chambers increased, however it should be noted that the drying chambers utilize only waste heat from the kilns, no supplementary heating is used. The drying chambers do not have gas burners.
- There are similarities between the size of a boiler (nameplate capacity) and the actual output. The guidance is clear that the nameplate capacity is the deciding factor. It is unfortunate that from the PDD it could be interpreted that the dryers are part of the capacity. However as they are cubicles using waste heat from the kiln they can restrict the output, but do not change the kiln capacity of the Lawley factory.

Conservativeness of the emission reduction

- The project participants have chosen to limit the claim for emission reductions to 73 million bricks per annum cap. This limitation expressed the voluntarily conservative approach chosen by the project participants. It is not required by AM0008.
- Theoretically, if the methodology was still available, the actual firing capacity of the facility could be taken as the cap and the emission reduction calculated accordingly. This would allow the emission reduction associated with the fuel switch for the current volume of 80 [92] million bricks to be claimed by the project participant. The emission reduction e.g. associated with the output of 92 million bricks would be 23 900 ton CO2 equivalent,



- therefore higher than under the 73 million brick cap; also, the use of a monthly (instead of yearly) production conversion factor is a further conservative approach.
- The approach taken is providing a conservative volume of real (conversion has been done), measurable (gas flow rates and coal consumption based on actual values) and long term emission reduction (no potential for reversal of emission reductions).

SGS Response to 2:

The additionality as required per AM0008 is calculated and summarized in the table below, for the following 3 scenarios

- As per the registered project capped on 73 million bricks;
- A hypothetical scenario based on all the actual brick production for the year (92 million bricks);
- A hypothetical scenario based on the maximum capacity of the facility corresponding to 98 million bricks produced.

Table 1: NPV calculations

Brick production per annum	73 million	92 million	98 million (maximum capacity)
NPV without CER income	-17.7 million ZAR	-25.7 million ZAR	-28.2million ZAR
Estimate CER volumes	19 000	23 900	25 500
(rounded values)			
NPV with CER income	-15.2 million ZAR*	-20.4 million ZAR	-22.6 million ZAR

^{*}The PDD states a NPV with the income from CERs of -2.3 million ZAR, this was however updated to actual CER as per the monitoring report and current exchange rates

The impact of the production rate does not change the conclusion of the additionality, as required by AM0008, as shown in the table above. The NPV remains negative as natural gas costs was ZAR 21.5 /GJ and coal cost ZAR 3.74/GJ as stated in the PDD. Using the current costs of natural gas ZAR 33.4 /GJ and coal cost ZAR 6.21/GJ the NPV remain negative.

In terms of common practice, South Africa has large reserves of coal, and coal has been, and is, the cheapest energy source for industrial facilities. There is no legislation or policies restricting the use of coal in South Africa, and, in addition, there are no incentives to promote the use of natural gas in any sector. Especially in the brick industry coal is the dominant energy sources.



We hope that the above clarifications and attached information addresses the concerns of the Board. We however apologise if it was not sufficiently clear from our verification and certification report.

Siddharth Yadav (Tel. +441276697837), Harmke Immink (+27832281781), and Wim Luyckx (+31 207957839) are the contact people for the review process and are available to address questions, if needed by the Board.

Yours sincerely,

Siddharth Yadav Technical Reviewer

Siddharth.yadav@sgs.com

T: +44 1276 697837 M: +44 7712785772 Irma Lubrecht
Technical Reviewer
Irma.Lubrecht@sqs.com

Shubresit

T: +31 181 693287 M: +31 651 851777