Mr. Hans Jürgen Stehr
Chair, CDM Executive Board
UNFCCC Secretariat
CDMinfo@unfccc.int

5 September 2007

Re: Request for review of the request for issuance for the CDM project activity 'Shandong Dongyue HFC23 Decomposition Project' (Ref. No. 0232)

Dear Mr. Stehr,

SGS has been informed that the request for issuance for the CDM project activity 'Shandong Dongyue HFC23 Decomposition Project' (UNFCCC Ref. No. 0232) is under consideration for review because three requests for review have been received from members of the Board.

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

1. The first concern in the Requests states:

The verification report mentions that during this monitoring period there were 21 short stops of the HFC23 incineration, for which the analysis of HFC23 in tail gas at the time of each stop and restart was done as per the monitoring plan. Clarification is required whether the HCFC22 was still being produced when the HFC23 incinerator stopped operating, and how the quantity HCFC22 produced during these periods have been taken into account in the subsequent calculation of emission reductions.

SGS response:
Annex1 of this letter clarifies the situation of HCFC22 production at each down time of the HFC23 incineration. The HCFC22 was being produced during 15 out of the 21 stops, and the longest duration of the 15 stops is 6h43min.

There is a buffer system in front of the HFC23 flow meters to stabilize HFC23 load to the incinerator and can act as temporary HFC23container when the incineration fails down. HFC23 originated from the HCFC22 unit at downtime of HFC23 incineration is contained in the two buffer tanks. According to the technical specification which is presented in Annex 2 of this letter, each tank has a capacity of containing 1932.19kg of HFC23, the maximum HFC23 inflow load is 140kg/h, thus the minimal buffering duration equals to 2*1932.19/140=27.6hrs. As mentioned above, the longest duration of the 15 stops during which HCFC22 was being produced is 6h43min, hence, the HFC23 generated in these periods had been totally contained in the buffer system and subsequently decomposed after the incineration restarted.

The AM0001 version 3 or later versions does not specify how to deal with the amount of HCFC22 produced during down time of HFC23 incineration, hence, on the basis of above facts, the HCFC22 produced during downtime of HFC23 incineration was counted in the total Q_HCFC22 of this monitoring period.

2. The second concern in the Request 2 states:

The PP/DOE shall further clarify:
o whether the amount of CERs is higher than estimated in PDD;
o which are the reasons for increase, if an increase has indeed occurred;
o if this increase comes from increased production of HCFC22 (compared with calculated one based on maximum annual production of 36,475.99 t HCFC22);
o if monitored HCFC22 production was above the calculated one for all periods (months) after the commissioning of HFC23 decomposition facility;

SGS response:
The project is applying a conservative approach in interpreting the cap requirements and in calculation of emission reduction. Tables in page13-14 of the Monitoring Report have clearly demonstrated the results of the check against cap requirements and the calculation of eligible Q_HFC23 and then emission reductions. Section 3.2.8 of the Verification Report has also described how the cap requirements were checked and conformed. Through this conservative approach, the amount of CERs is not likely to be higher than estimated in PDD, in other words, excessive amount of destroyed HFC23 will not be counted for claiming CERs in case either the monitored HCFC22 production or the ratio of HFC23/HCFC22 was above the eligible value for all periods (months) after the commissioning of HFC23 decomposition facility.

3. The third concern in the Request 2 states:

The monitoring plan includes the monitoring of incineration temperature (Temp y), which is monitored for the purpose of stable and high efficiency operation of the incinerator. The normal operation temperature is 1250 +/-30^{0}C. If the temperature is lower than 1200^{0}C, the supply of HFC23 waste to incinerator is automatically stopped to avoid unstable decomposition. The monitoring report does not provide any information on the results of the monitoring (the temperature range, frequency of automatic stopping, etc.). The DOE shall further clarify how they have dealt with this issue.

SGS response:
The incineration temperature is measured and recorded automatically and continuously by DCS (Distributed Control System) and forms a continuous temperature curve. Interlock is set that if the temperature drops lower than 1200^{0}C, the HFC23 flow to incinerator is automatically cut off. During on site audit, as a routine procedure, SGS had checked the entire temperature curve of this monitoring period together with HFC23 flow curve, and confirmed that the temperature range in normal operation period was within 1250+/-30^{0}C as stated in the monitoring report. No stop of HFC23 incineration was caused by the drop of temperature to lower than 1200^{0}C but by other factors as presented in Annex1.

4. The fourth concern in the Request 2 states:

The Monitoring Report includes contradictory values of gas chromatograph detection limit. It is stated on page 4 that "decomposition rate of fluorinated organic waste is more than 99.99%, which is the maximum measuring limit by conventional gas chromatography", i.e. the detection limit should be 0.01% but not 0.0001%, as in other sections of the monitoring report. The DOE shall further clarify this issue.

SGS response:
The sentence 'decomposition rate of fluorinated organic waste is more than 99.99%, which is the maximum measuring limit by conventional gas chromatography' is cited from section A.4.3.2 of the registered PDD, it is talking about performance of the incinerator and is only an ex-ante statement when preparing the PDD, it has nothing to do with the actual Gas Chromatography used in this project for analyzing HFC23 in the tail gas of HFC23 incineration. The detection limit (0.0001%) of the actual Gas Chromatograph (Agilent 6820) was determined by Metrology and Testing Centre of Zibo City.

5. The fifth concern in the Request 2 states:

The DOE shall clarify the references to a DCS in page 9 of 15 (and following pages) of the Verification and Certification Report and as that acronym is not included in the list of abbreviations of this report.

SGS response:
DCS in the Verification Report refers to Distributed Control System, which refers to a control system usually of a manufacturing system or process, in which the controller element is not central in location but are distributed throughout the system with each component sub-system under the control of one or more controllers. This acronym will be included in abbreviations of next Verification Reports.

6. The sixth concern in the Request 2 states:

The DOE shall further clarify which were the elements that allowed the closure of CAR(03), as they stated that QA/QC on this point needs to be strengthened, and whether future strengthening does not impair current monitoring and verification, taking into account the fact that during "this monitoring period, there have been totally 21 short stops".

SGS response:
As stated in the CAR(03), operation information of the incinerator is recorded automatically and continuously by DCS and can be tracked out by reviewing the flow and temperature curves, the manual log is for facilitating crosscheck and corroboration as additional requirement, thus future strengthening will not impair current monitoring and verification. PP has improved the procedure for manual logging any event on top of the automatic archive by DCS, the CAR(03) was thus closed out.

7. The seventh concern in the Request 2 states:

The DOE shall clarify the references to the GC and GC-FID in page 10 of 15 of the Verification and Certification Report as that acronym is not included in the list of abbreviations of this report.

SGS response:
GC: Gas Chromatograph; GC-FID: Gas Chromatograph using Flame Ionization Detector
The acronyms will be included in abbreviations of next Verification Reports.

We hope that this letter and enclosed Annexes address the concerns of the Board. If you require further information, Mr. Qi Yang (qi.yang@sgs.com; +86 13916512072) will be the contact person for the review process and is available to address questions from the Board during the consideration of the review in case the Executive Board wishes.

Yours sincerely

Qi Yang
Lead Assessor
Qi.Yang@sgs.com
T: +86 21 61152263
M: +86 13916512072

Irma Lubrecht
Technical Reviewer
Irma.Lubrecht@sgs.com
T: +31 181 693293
M: +31 651 851777

Encl. :
As above