31 January 2008

The Executive Board of the Clean Development Mechanism

Submitted through SGS

Re: Request for review of the request for issuance for the CDM project activity 'HFC23 Decomposition Project of Zhejiang Juhua Co., Ltd, P. R. China' (Ref. No. 0193)

Dear Sirs:

Zhejiang Juhua Co., Ltd has been informed that the request for issuance for the CDM project activity "HFC23 Decomposition Project of Juhua Co., Ltd, P.R.China" (UNFCCC Ref. No.0193) is under consideration for review because three requests for review have been received from members of the Board.

To address the reasons for the requests for review, project participator would like to comment on the reasons for review and provide additional information through this letter.

1、**The first concern in the Requests states:**

The DOE is required to verify that the w value cannot exceed the capped value for the past one year period, in accordance with paragraph 90 of EB35.

PP response:

In the past one (project) year (1 Aug 2006-31 July 2007, from the first to fifth monitoring period), the total decomposed HFC23 is 568.81981tonne, the production of HCFC22 from 2-703 production line in this plant is 17387.45tonne, the ratio of decomposed HFC23/ production of HCFC22 is 3.27%, but the actual amount of HFC23 that used to calculate the emission reductions is 495.5100tonne (according to the registered PDD, the eligible annual production of HCFC22 is 16517tonne, the maximum ratio is 3%, 16517*0.03=495.5100), the redundant HFC23 has also been decomposed, but not include in the calculation of emission reductions, so the "w" that used in the calculation for claiming CERs is 3%.

During the past one (project) year, when calculating CERs at each monitoring period, the quantity of decomposed HFC23 that exceed the capped value (3%) has been deducted in the calculation for claiming CERs. The HFC23 that generated from the HCFC22 production (from 2-703 production line) which beyond 16517tonne in the past one (project) year had also been decomposed, but in the fifth periodic monitoring report (the last period in a project year), that excessive amount of decomposed HFC23 was not included in the calculation for claiming CERs. The information of the production of HCFC22 and HFC23, and the calculation of CERs was provided in the monitoring report of the 5th period (page 14 and 19), and is extracted below for easy reference:

Summary for HCFC22 and HFC23 production up to this monitoring period							
Period	HCFC22 cumulative production MT (A)	Approved HCFC22 annual production in PDD MT (B)	A＜B?	The cumulative amount of HFC23 decomposed MT (C)	Eligible HFC23 amount (D)=A*w if A＞B (D)=B*w	C＜D?	Eligible cumulative HFC23 amount for calculating ER MT (E)
01-Aug-06 to 02-Oct-06	2844.01	16517	Yes	100.5853	85.3203	No	85.3203
01-Aug-06 to 30-Dec-06	6940.63	16517	Yes	236.46279	208.2189	No	208.2189
01-Aug-06 to 28-Feb-07	9979.98	16517	Yes	334.87534	299.3994	No	299.3994
01-Aug-06 to 30-Apr-07	13089.49	16517	Yes	435.32828	392.6847	No	392.6847
01-Aug-06 to 31-Jul-07	17387.45	16517	No	568.81981	495.5100	No	495.5100

Monitoring Period	Period	ER_y t CO2e	Q_HFC23_y MT	B_HFC23_y MT	GWP_HFC23	E_DP_y t CO2e	L_y t CO2e
1st	01-Aug-06 to 02-Oct-06	997640.61	85.3203	0	11700	70.9691	535.9276
2nd	03-Oct-06 to 30-Dec-06	1437117.14	122.8986	0	11700	92.9433	703.5398
3rd	31-Dec-06 to 28-Feb-07	1066265.16	91.1805	0	11700	66.97	479.72
4th	1-Mar-07 to 30-Apr-07	1090899.73	93.2853	0	11700	68.25	470.03
5th	1-May-07 to 31-Jul-07	1202283.96	102.8253	0	11700	91.44	680.61

The sixth periodic verification is the first verification in the second project year(1 Aug 2007-31 Jul 2008), in this monitoring period(1 Aug 2007-31 Oct 2007), a total of 140.35395tonne of HFC23 has been decomposed, the HCFC22 production of 2-703 production line is 4494.90tonne, the ratio of the amount of decomposed HFC23 / HCFC22 production is 3.12%, but the amount of HFC23 that used in the calculation for claiming CERs is 134.84700tonne, the amount of HFC23 that beyond the 3%(5.50695tonne) had already been deducted, not include in the calculation of emission reductions, so the “w” that used in the calculation for claiming CERs is 3%.

During this monitoring period (1 Aug 2007-31 Oct 2007), the production of HCFC22 and HFC23, and the amount of HFC23 that used in the calculation for claiming CERs is shown as follow (page 14 of sixth monitoring report ver.02):

Summary for HCFC22 and HFC23 production up to this monitoring period in the second project year							
Period	HCFC22 cumulative production MT (A)	Approved HCFC22 annual production in PDD MT (B)	A< B?	The cumulative amount of HFC23 decomposed MT (C)	Eligible HFC23 amount (D)=A*w if A>B (D)=B*w	C<D?	Eligible cumulative HFC23 amount for calculating ER MT (E)
1-Aug-07 to 31-Oct-07	4494.90	16517	Yes	140.35395	134.84700	No	134.84700

Monitoring Period	**Period**	**ER_y t CO2e**	**Q_HFC23_y MT**	**B_HFC23_y MT**	**GWP_HFC23**	**E_DP_y t CO2e**	**L_y t CO2e**
6th	1-Aug-07 to 31-Oct-07	1577196.23	134.84700	0	11700	95.92	417.75

2. The second concern in the Requests states

Further clarification is required on how DOE confirmed the incinerator operation temperature above 800° C as stated in the Verification Report.

PP response:

In this project, the thermometers are used to measure the operation temperature of the incinerators, the DCS collects the temperature of every incinerator at each second and automatically generate the *temperature curve chart;* at the same time, the DCS automatically collect the temperature of all incinerators in every hour and consequently generate the *daily record of temperature in incinerator system of CDM project*. In addition, when the operation temperature of incinerator is below 850℃, the feeding of HFC23 is automatically cut off to guarantee a complete decomposition of HFC23, the relevant description can be found on page 24 of monitoring report.

3. The third concern in the Request 3 states:

When referring to the quantity of HCFC22 produced, the Monitoring Report (in page 21 of 31 of Appendix 3) describes the implementation of the monitoring procedure as calculation of the "Sum of the quantity of HCFC22 from production line to packaging shop each time". Meters, their accuracy and calibration are not mentioned. However, the DOE in page 9 of 17 of Verification report states both that "HCFC22 production is measured by using mass flow meter, meter readings by shift is taken as raw record and is used to generate the daily data then monthly statistics" and that "The reported Q_HCFC22 was checked by verifying the raw records and monthly statistics and no error was found". Further clarification is required.

PP response:

In the sixth monitoring report ver.02 *(in page 21 of Appendix 3)*, "Sum of the quantity of HCFC22 from production line to packaging shop each time" refers to a method of calculating monthly production of HCFC22. The quantity of HCFC22 from production line to packaging shop is measured by mass flow meter. The process of supply HCFC22 from production line to packaging shop is a Intermittent Feeding process, every time, when the HCFC22 is sent from production line to packaging shop, the reading of HCFC22 flow meter before delivery and the reading of HCFC22 flow meter after delivery are recorded, both data are entered into the *material mutual supply list*, the difference between these two readings is the amount of HCFC22 that has been sent to packaging shop during the transmission. The monthly HCFC22 production is calculated according to the amount of HCFC22 on the *material mutual supply list*. The project participant had provided the relevant information to DOE during the on-site verification.

The above information is not clearly described in the sixth monitoring report ver.02, the project participant has revised the monitoring report; the relevant information can be found on page 21 of appendix 3 of revised monitoring report.

The HCFC22 mass flow meter is calibrated every month as per methodology AM0001. The relevant calibration records have been submitted to DOE during the on-site verification. The information of calibration of measurement instruments can be found on page 11 of monitoring report and page 21 of the revised monitoring report.

4. The forth concern in the Request 3 states:

Further explanation on the decomposition technology used and further clarification is required on whether the decomposition technology is an electric heater, as mentioned in page 6 of 31 of the Monitoring Report: "The decomposition technology does not use fossil fuel; instead uses electric heater to obtain the decomposition temperature", or steam at 800C° as detailed in PDD (page 5): "The proposed project activity will utilize the superheated steam decomposition technology".

PP response:

This project use a superheated steam decomposition technology: electric heaters are used to heat the steam into superheated steam which participates in the HFC23 decomposition process; and the temperature of incinerators is also stabilized by the electric heaters. The relevant description can be found on page 5, A.4.3 of registered PDD.

5. The fifth concern in the Request 3 states:

To verify the quantity of HFC23, the methodology requires analysis of the effluent gas when the thermal oxidizer stops ("When the thermal oxidizer stops, analysis of the effluent gas is done to check leaked HFC23 by sampling"). The Monitoring Report mentions analysis of the effluent gas; however it is not clear if this analysis was performed each time the thermal oxidizer stopped. Further clarification is required as some of the necessary parameters to perform that task are not referred to in the Monitoring Report.

PP response:

In this HFC23 decomposition facility, there are 8 identical incinerators in parallel. Two of them as a group, if one or some of the incinerators stop, the other incinerators can continue their operation. Under general condition, it is sufficient to run 6 incinerators for decomposition, the other incinerators act as back-up. The project owner alternately checks and maintains the 8 incinerators.

The requirement of the methodology AM0001 to analyze the content of HFC23 in off-gas was strictly observed. According to the registered PDD, the details of the analysis of off –gas is as follow:

During operation, the content of HFC23 in off-gas is analyzed on every Thursday, in this monitoring period, 13 normal analyses have been conducted; and there is no such situation that all 8 incinerators were stop; but for conservative reason, when a single or a group of incinerator stop, project owner immediately collects the off-gas and analyze the content of HFC23 in off-gas to identify the amount of HFC23 in off-gas, during this monitoring period, a total of 78 analyses have been conducted. All the results of these analyses had been submitted to DOE on on-site verification. The relevant information can be found on page 24and 25 of appendix 5 of revised monitoring report.

6. The sixth concern in the Request 3 states:

Further clarification is required on the emission factor of the steam supply, on the parameters used in the calculation, its sources and levels of accuracy.

PP response:

The calculation of the CO_2 emission factor of the steam supply ($E\_F_{2,y}$) is as follow:

$E\_F_{2,y}$= coal consumption for steam supply*heat value of coal*emission factor

According to the registered PDD, IPCC default values are used as the heat value of coal and the emission factor. The monitored data applied is the coal consumption for steam supply.

The steam supply in this project is provided by JTPP which monitor and calculate the standard coal consumption for heating and enthalpy value of steam within the JTPP every month, a copy of operation log containing these data has been submitted to DOE during on-site verification. The monthly coal consumption for steam supply=monthly standard coal consumption for heating *monthly enthalpy value of steam.

We hope that this letter and enclosed revised Monitoring Report address the concerns of the Board. If further information is required, Zhang Xueliang 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.

Zhang Xueliang
Zhejiang Quhua Fluor-Chemistry Co., Ltd.
Address: Quzhou, Zhejiang Province, P.R.China
E-mail: fhzxl@juhua.com.cn
Tel: +86-570-3614382
Fax: +86-570-3098687
P.C. 324004