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Att: CDM Executive Board

Your ref.:  
 CDM Ref 0001

Our ref.:  
 MLEH/ETEL

Date:  
 27 September 2007

**Response to requests to review  
 Project for GHG emission reduction by thermal oxidation of HFC 23 in Gujarat, India  
 (0001)**

Dear Members of the CDM Executive Board,

We refer to the issues raised by the requests for review by three Board members regarding our request of issuance of CERs for project activity 0001 “*Project for GHG emission reduction by thermal oxidation of HFC 23 in Gujarat, India*” and would like to provide our initial response to issues raised.

**Comment 1:**

*The ratio of HFC 23 generated to HCF22 produced, w was calculated based on cumulative HCFC 22 and HFC 23 production, which results in 2.76% less than the allowable 2.90% in the PDD. If calculated for the monitoring period only, the w is 3% higher than the maximum allowable value. Additionally the CERs generated during the first six months of the second monitoring year (Feb-July 2007) amounts to 3257641 t CO<sub>2</sub> while the registered PDD estimates an annual reduction of 3,000,000 t CO<sub>2</sub>. Further explanation is required.*

**DNV Response**

As per AM0001, it has to be verified that the HFC23 generated quantity does not exceed the actual HCFC22 production multiplied by the waste generation rate, **on an annual basis**. In the case of this project, and as per the validated and registered Project Design Document, the value is 2.90%. Since the project began operations on the 13<sup>th</sup> February 2006, this check has been applied, at every monitoring period, for the “monitoring year” beginning 13<sup>th</sup> February each year and ending 12<sup>th</sup> February of the next year, thereby ensuring that there would be ten whole “years” for the crediting period of the project.

DNV has verified that the cumulative reported ratio w of 2.76% is correct based on production numbers of HCFC22 and HFC23 found in SCADA data sheets, as well as HFC23 storage records. DNV also reconfirms that this value also does not exceed the 2.90% threshold applied by the project for this factor and the same has been clearly stated in Para 3.1.1 of our Verification and Certification Report. We would also like to highlight that even if the ratio w is calculated for this monitoring period only, the ratio “w” is lower than 2.90%, as shown below, and is not 3%, as stated in the requests for review.

Period From	Period To	HCFC22 production	HFC23 generation	Waste generation rate "w" %
13 <sup>th</sup> February 2007	31 <sup>st</sup> March 2007	2792.670	70.891	2.54%
1 <sup>st</sup> April 2007	5 <sup>th</sup> May 2007	1536.140	43.094	2.81%
<b>6<sup>th</sup> May 2007</b>	<b>31<sup>st</sup> July 2007</b>	<b>5428.420</b>	<b>155.593</b>	<b>2.87%</b>
Cumulative for the year*		9757.230	269.578	2.76%

The "estimate" of emission reductions provided in the validated and registered Project Design Document has been based on a purely illustrative production figure of 10,000 MT of HCFC22 per year and that the production is expected to increase based on market conditions, until the plant capacity is reached. DNV has verified the daily production records and also confirmed in the verification report (Para 1.3) that the HCFC22 production during the verification period is "well within the installed capacity as per the validated Project Design Document" and (Para 3.1.1) that "the cumulative reported ratio of 2.76% is correct and does not exceed the 2.9% threshold applied by the project for this factor".

The daily production capacity as per the validated and registered Project Design Document is given as up to 75 TPD of HCFC22. This is referred to at Para A.3.2.2 (f) stating that "The plant has instantaneous installed capacity in excess of 60 TPD HCFC 22 (up to 75 TPD). DNV has verified that the daily HCFC22 production is within the capacity of 75 TPD, the HCFC22 plant, as per the validated and registered Project Design Document. This is mentioned in Para 1.3 of the Verification Report.

We would like to reiterate that a similar issue was responded to by DNV in respect of the request for review for the previous (tenth) Request for Issuance for this Project. The responses were accepted at the EB33 meeting and based on its recommendations CERs were issued on 10<sup>th</sup> August 2007.

**Comment 2:**

*According to the monitoring plan from the PDD there are parameters which have recording frequency of one month. Hence in the Monitoring Report at least monthly values of such parameters ( Q CO2-HFC 23, Q Fuel Q CO2 Fuel, Q HCFC 22, QHFC23. Composition of HFC 23,Q Power,Q ,Steam,Q CaOOH2, Q NaOH, Q Solidwaste should be recorded while for the monitoring report submitted only cumulative values are presented.*

**DNV Response**

The referred monitoring report includes the readings of all the monitored parameters for the monitoring period (06 May – 31 July ) as a whole.

In actual practice records are maintained on a daily basis for each of the monitored parameters. Most of the data is automatically archived in the SCADA system, and from this data, the daily values are electronically computed. All daily values have been verified by DNV during verification. This data, as well as the monthly totals, can be provided to the Executive Board, if required.

We would like to reiterate that a similar issue was responded to by DNV in respect of the request for review for the previous (tenth) Request for Issuance for this Project. The responses were

accepted at the EB33 meeting and based on its recommendations CERs were issued on 10<sup>th</sup> August 2007.

**Comment 3:**

*The verification report indicates that a carbon emission factor of natural gas used by the thermal oxidiser is  $2.95 \times 10^{-3}$  tonnes CO<sub>2</sub>/m<sup>3</sup> while the factor in the spreadsheet was in tonnes CO<sub>2</sub>/kg. Clarification required.*

**DNV Response**

As part of verification, DNV has verified that the carbon emission factor of natural gas is  $2.95 \times 10^{-3}$  tonnes CO<sub>2</sub>/kg. However the unit has been wrongly mentioned as CO<sub>2</sub>/m<sup>3</sup> in the verification report due to a typographical error and oversight. We are grateful for the requests for review pointing out this error. We would like to reconfirm that this has no effect on the CER calculations. The necessary corrections have accordingly been made in the enclosed revised verification report as part of Section 3.1.1.

We sincerely hope that the Board find our elaboration on the above satisfactory and look forward to the issuance of CERs for this project activity.

Yours faithfully

for DET NORSKE VERITAS CERTIFICATION AS



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*Project Manager*



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