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Att: CDM Executive Board

Your ref.:	Our ref.:	Date:
CDM Ref 0887	MLEH, TANGZA	11 January 2009

Response to requests for review of issuance request for project activity 0887 "Shenzhen Xiaping Landfill Gas Collection and Utilization Project" (monitoring period from 1 July 2007 to 1 September 2007)

Dear Members of the CDM Executive Board,

We refer to the requests for review raised by three Board members concerning DNV's request for issuance for project activity 0887 "Shenzhen Xiaping Landfill Gas Collection and Utilization Project" and would like to provide the below initial response to the issues raised in the request.

Question 1: How it verified that the continuous monitoring or periodical measurements, at 95% confidence level taking statistically valid number of sample, of methane content in the LFG was conducted;

DNV Response:

A total of 1451 measurements have been taken for this two months period under verification and the measured hourly methane concentrations were reported in the spreadsheet submitted with the request for issuance. Hence, while the methane concentration in the LFG was not measured continuously, the hourly measurements give a good representative spread of the methane concentrations. The measured data has been checked during site visit by DNV.

In the clarification AM_CLA_0095 dated 27 June 2008, the Meth Panel allowed the option of conducting periodical measurements with a minimum of four quarterly measurements per year and the lower bound of the 95% confidence interval is to be used. This clarification was integrated into ACM0001 version 9.1, which mentions that if the captured gas is used to produce energy or a default value for flare efficiency is adopted as per the guidance given in the "*Tool to determine project emissions from flaring gases containing Methane*", the fraction of methane in the landfill gas ($w_{CH4,y}$) can either be measured with a continuous analyzer or, alternatively, conducting periodical measurements with a minimum of four quarterly measurements per year. In case periodical measurements, the lower bound of the 95% confidence interval should be used to estimate baseline methane emissions to ensure conservativeness.

In this context, it must also be noted that the project applies version 04 of ACM0001 which does not require the use of the "*Tool to determine project emissions from flaring gases containing Methane*" and the flare efficiency may be measured annually.

As mentioned in the project participant's response, the variation of w_{CH4} during this monitoring period is 56.40%± 0.19%, i.e. 56.21% – 56.59%, under the 95% confidence level with the average w_{CH4} of 56.40%.

In accordance with the clarification AM_CLA_0095 and version 9.1 of ACM0001, the lower bound of the 95% confidence interval should be used to estimate baseline methane emissions to ensure conservativeness. In this verification period, the cumulative flow meters recorded a total of 1,935,847 Nm^3 (at normal conditions) of LFG to the generators and 185,342 Nm^3 (at normal conditions) to the flare. Hence, $MD_{project}$ (the quantity of methane destroyed by project activity) is calculated to 854.62 tCH_4 as per the clarification AM_CLA_0095 and updated ACM0001 version 9.1. The calculation provided in the project participant's response has been verified by DNV.

In the monitoring report submitted for issuance, $MD_{project}$ was calculated based on the difference of the cumulative flow between hour "h" and the previous hour and the average methane concentration of the hour "h" and the previous hour. By this way, $MD_{project}$ was calculated to be 854.37 tCH_4. Hence, the values used in the monitoring report are conservative comparing these two ways for the calculation of $MD_{project}$.

Question 2: How it verified that the flare efficiency was calculated on yearly basis, since the verification report only refers to the joint inspection report conducted in August 2006;

DNV Response:

The efficiency of the flare operated during this verification period was tested in June 2007 with validity duration of one year. This is evidenced by the Flare Test Report for Shenzhen Xiaping LFG Project prepared by Centre Testing International (Shen Zhen) Limited. Centre Testing International (Shen Zhen) Limited is a qualified third party for the flare test, which is evidenced by the flare test certificate issued by China National Accreditation Service for Conformity Assessment on 30 June 2006.

The efficiency (99.998%) in the test report is the same as the description in the monitoring report. The test report has been checked by DNV.

The joint inspection report conducted in August 2006 is the completeness acceptance report on the construction and installation of the flare, which is not the source for the flare efficiency.

We sincerely hope that the Board accepts our above explanations.

Yours faithfully
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