UNFCCC Secretariat
Martin-Luther-King-Strasse 8
D-53153 Bonn
Germany

Att: CDM Executive Board

DET NORSKE VERITAS
CERTIFICATION LTD
Palace House
3 Cathedral Street
London SE19DE
United Kingdom
Tel: +44 (0)20 7357 6080
Fax: +44 (0) 20 7407 1239
http://www.dnv.com

| Your ref.: | Our ref.: | Date: |
|---|---|---|
| CDM Ref 0650 | MLEH/ETL | 4 January 2007 |

# Response to request for review
## "Methane Recovery and Electricity Generation Project GCM 20" (0618)

Dear Members of the CDM Executive Board,

We refer to the requests for review raised by three Board members concerning DNV's request for registration of the "Methane Recovery and Electricity Generation Project GCM 20" (0618)" and would like to provide the following response to the issues raised by the requests for review.

***Comment 1:***

*Clarification is requested with regards to debundling, as this project is one of 29 in the same country. There are no maps showing the location of the project.*

**DNV Response:**

Section A.4.1.4 of the PDD of the "Methane Recovery and Electricity Generation Project GCM 20" (0618)" as well as the PDDs of the other 28 the Methane Recovery and Electricity Generation Project by GCM include GPS coordinates of the sites comprised the project.

DNV has validated all 29 Methane Recovery and Electricity Generation Project by GCM and assessed the GPS coordinates provided for these projects. As stated in the validation protocol of DNV's validation report, the project activity is not a debundled component of a larger project activity as the other projects proposed by the project participants for registration as CDM project activities are not within 1 km of the project boundary of this project activity.

***Comment 2:***

*AMS-III.D version 9, which is quoted in the PDD, determines that "the flare efficiency, defined as the fraction of time in which the gas is combusted in the flare, multiplied by the efficiency of the flaring process, shall be monitored". But the PDD also state that: "Surplus biogas will be flared using a high efficiency semi-enclosed or enclosed flare system. The flare and genset are both rated by their manufacturers at 98% combustion efficiency for biogas produced by the digester. (A conservative combustion efficiency of 90% will be applied ex-ante, but actual measurements of efficiency will be attempted ex-post)", which is confirmed by the Validation Report. The flare efficiency is to be monitored, not "attempted" to be measured ex-post.*

**DNV Response:**

DNV acknowledges that AMS-III.D, version 09, requires that "the flare efficiency, defined as the fraction of time in which the gas is combusted in the flare, multiplied by the efficiency of the flaring process, shall be monitored". However, AMS-III.D does not provide guidance on the

frequency or type of flare efficiency monitoring that is required. DNV has thus applied the guidance given in version 01* of ACM0010, the *Consolidated baseline methodology for GHG emission reductions from manure management systems*, which states that "in case the yearly measurement of efficiency of the flare is not performed, the efficiency of the flare shall be a default value of 90%".

As stated in the PDD, the project participants will attempt to measure the flare efficiency as required. However, measuring the flare efficiency in situ may not always give reliable results. Hence, the project participants have suggested to use a conservative default flare efficiency of 90% if the flare efficiency measurements are not successful.

***Comment 3:***

*The following information should be included:*

i. *Digester dimensions; digester biogas output - maximum and average; and livestock population served by the digester;*
ii. *Technical details of the electricity generation sets that will be installed by the project. Please provide the installed capacity of the generator sets, type of turbine, rated efficiency etc. in the PDD.*

**DNV Response:**

The expected average daily biogas offtake for the project is included in section E.2 of the PDD. Moreover, information on the livestock information, which has been the basis for determining the expected average daily biogas offtake, has been submitted in the form of a separate spreadsheet (Please note that livestock data has been made illegible in the version of the spreadsheet made publicly available, but has been included in the version to be treated confidential by the Board, RIT members and the Secretariat). It must be noted that actual biogas generation will be monitored ex-post and that the estimate included in the PDD is only used for forecasting emission reductions.

The project participants have in their initial response to the requests for review provided further details on the estimated digester dimensions and technical details of the electricity generation set that is likely to be installed (Note that the construction of this project has been subject to some delays).

Although the exact capacity of the electricity generation set is not yet known, the capacity will be significantly less than the eligibility threshold of 15 MW of AMS-I.D.

We sincerely hope that the Board accepts our aforementioned explanations.

Yours faithfully
for DET NORSKE VERITAS CERTIFICATION LTD

Einar Telnes
*Director*
International Climate Change Service

Michael Lehmann
*Technical Director*

* Version 01 of ACM0010 was the version in force at the time of submitting the "Methane Recovery and Electricity Generation Project GCM 20" for registration on 20 September 2006