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Your ref.:  
 AWMS Methane Recovery Project BR07-S-34, Bahia,  
 Espirito Santo, Minas Gerais, and Sao Paulo, Brazil (1534)

DNV responsible ref.:  
 MLEH

Date:  
 6 June 2011

QUESTIONS RAISED BY CDM EXECUTIVE BOARD MEMBERS	RESPONSE SUMMARY FROM DNV	ACTION TAKEN ( IF RELEVANT)
<p>1. The DOE is requested to clarify how it verified that the project activity was implemented and operated as described in the PDD as per paragraph 197 of VVM (version 01.2) considering that monitoring report states that the project participant will no longer monitor one of the sites (ID 21522).</p>	<p>This project, an early conceptual approach of the programme of activities, consists of 4 swine production sites owned and operated by different entities. Three of the sites are operational and in use and still contribute to the overall project activity. However, one site, 21522, which was implemented and operated according to the PDD, has ceased operation.</p> <p>AgCert International, the project participant, designed, operated, and maintained the project equipment. However, this digester has not operated as expected, having captured very little biogas since February 2008. Multiple attempts to make the digester effective have been fruitless with only 51000 cubic meters of gas from 5 Oct 2006 to May 2009. Based on a mutual agreement between the site owner and AgCert International, the business contract was severed for the</p>	<p>The verification / certification report was amended to clarify how DNV verified that the project was implemented and operated as described in the PDD.</p>

	<p>site in question, thus terminating continued operations and maintenance of the anaerobic digester and associated equipment by AgCert International, plc, as well as ending continued monitoring of the site's contribution to project activity 1534.</p> <p>It is thus DNV's opinion that the project implementation complies with the description in the PDD and advanced waste management systems (AWMS), i.e. anaerobic digesters, were implemented also at the site 21522. This was verified by DNV during the verification of previous monitoring periods.</p> <p>The Guidelines on assessment of different types of changes from the project activity as described in the registered PDD state that changes to the project design to be considered may include "removal or addition of one (or more) site of a project activity registered with multiple-sites". It is DNV's understanding that "removal" would apply in case a site in the PDD was never implemented or the measure to reduce greenhouse gases (GHG) emissions is physically removed. Due to this, DNV has not considered it necessary to submit a notification of changes from the project activity as described in the registered PDD.</p>	
<p>2. If the site above is still included in the project activity and was operational during this monitoring period, the DOE is requested to clarify how it verified that the calculation of the emission reductions has been correctly carried out in accordance with the formulae and methods described in the registered PDD and monitoring plan,</p>	<p>As noted above in the response to Item 1, the legal entity of the site has discontinued a contractual arrangement with the Project Participant, AgCert International. At the time of the contract termination, the site was not operational therefore no electricity would be consumed, and hence no leakage applied.</p> <p>Even in case the farmer again operated the AWMS to treat manure being produced by the swine farm connected to the AWMS, it would be appropriate to assume zero emission reductions for this site. Due to safety reasons, the farmer would in that case also continue to</p>	<p>The verification / certification report was amended to clarify how DNV verified that the calculation of the emission reductions has been correctly carried out in accordance with the formulae and methods described in the registered PDD and monitoring plan, considering that the emissions</p>

considering that the emissions related to the electricity consumption from this site are not accounted.	operate the flare. As shown in the monitoring report, leakage due to the site's electricity consumption for sites in operation is less than 1% of the measured emission reductions from these sites, i.e. the amount of methane being captured and flared. Hence, in case the AWMS is operated and consumes electricity, the operation of the AWMS will result in emission reductions which will exceed project emissions associated with the electricity consumption due to operating the AWMS. Considering zero emission reductions from this site would thus be in accordance with paragraph 208 (a) of the VVM (version 01.2), which states that the DOE may opt to make the most conservative assumption theoretically possible in finalizing the verification report in case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan.	related to the electricity consumption from site 21522 are not accounted.
3. The DOE is required to clarify how it verified the compliance of the calculation of baseline emissions with paragraph 6 from the methodology (i.e. for each year during the crediting period, emissions are calculated as the lower of the values between (i) the actual monitored amount of methane captured and destroyed by the project activity; and (ii) the methane emissions calculated ex ante using the amount of the waste or raw material that would decay anaerobically in the absence of the project activity)	<p>In accordance with AMS-III.D (version 11), baseline emissions are the lower of i) the actual amount of methane generated by the digester, captured and sent to the flare and ii) the amount of baseline methane emissions that were calculated ex-ante in the PDD based on livestock population data and IPCC default emission factors. The selection of the lower of these two values was done for each farm individually.</p> <p>i) The actual amount of methane that is captured and destroyed by the project is determined as follows: Average daily biogas volumes for each site and for a specific month are determined in accordance with a well defined procedure using the last biogas meter reading in the month prior to that month, the reading(s) in the month itself and the first reading in the month after that month. This average daily biogas volume is multiplied with the number of days in the month. The volume of methane is determined by multiplying the monthly biogas volume with the methane content determined for that month. The</p>	Section E of the monitoring report was revised (version 3) to include more details on the calculation of baseline emissions.

	<p>methane content is determined in accordance with a well defined procedure and represents a moving average which considers methane content measurements in the month of question (if available) and the methane content measurements in the two months prior and after the month in question. Applying the density of methane (adjusted for the average temperature of the month in question), the amount of methane captured and destroyed by the project activity is determined.</p> <p>ii) The baseline emissions from each year stated in the PDD are divided by the number of days in the year, then multiplied by the number of days within the reporting period to determine the baseline emissions in accordance with ii) above. The specific calculations are provided per site in 1534-MR01-BR07-S-34 Envirocert Calculations in rows 278-281, an excel spreadsheet which has been provided to DNV.</p>	
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