



CDM: Form for submission of requests for deviation prior to submitting request for issuance

(To be used by the DOE for requesting a deviation prior to submitting request for issuance)

Name of the entity (DOE) submitting this form	BVCH
Project Ref./Title of the project activity	514: AWMS Methane Recovery Project MX06-S-38, Tamaulipas, Mexico
Title/subject of deviation	Measurement of methane content of biogas
Specify the monitoring period for which the request is valid	01 Jun 2008 - 30 Sep 2011
Date and signature for the DOE	28 March 2012

Please use the space below to describe the deviation and substantiate the reason for requesting a deviation from provisions of registered monitoring plan.

This request is to allow deviation of measurement of methane content of biogas as specified by the parameter MC in Table D.6 of the registered PDD by measuring the CO₂ content of biogas and calculating the methane content instead of directly measuring the methane content.

MC

The project developer has undergone an extensive evaluation and selection process to find the most reliable and durable equipment for measuring methane at its project activities. This process took considerably longer than anticipated by the project developer. At this time, the project developer has identified and begun using this monitoring equipment and, as of October 2008 the direct measurement of methane has been implemented in accordance with the monitoring methodology and the monitoring plan for all sites and this practice will be used for all subsequent monitoring periods.

Prior to measuring the methane content the project developer has monitored the methane content of biogas using practices considered to be correct during validation and identical to the monitoring practices at other registered and verified projects by the same project developer applying AM0016 version 02.

Biogas consists of mainly CO₂ and methane. Recent measurements of both the methane and CO₂ content of biogas taken from sites within this project activity showed that the sum of CO₂ and methane averaged 98.88% with a 95% confidence level of 96.65%. An earlier analysis of other similar advanced Animal Waste Management Systems (AWMS) in Brazil and Mexico, developed by the same project developer and applying the same project technology showed that the sum of CO₂ and methane averaged 99.0% with a 95% confidence level of 96.7%. However, in order to be most conservative, the project developer has opted to use the minimum value of the sum of CO₂ and methane found in its testing as the value to be applied across the all projects of this methodology version. This value is 94% for the sum of CO₂ and methane with 6% trace or other gas. Hence, if this request for deviation is accepted, the percentage of methane in biogas will be calculated as 94% minus the percentage of CO₂.

Measurements of the percentage of CO₂ in biogas have the same accuracy as measurements of the percentage of methane. Hence, the monthly measurement of the percentage of CO₂ and the calculation of the percentage of methane as described above ensures in our opinion the same level of accuracy.

Please use the space below to describe and substantiate the assessment of the DOE that the deviation does not require a revision of monitoring plan or the changes from the project activity as described in the registered project design document.

As of October 2008 the direct measurement of methane has been implemented in accordance with the monitoring methodology and the monitoring plan for all sites and this practice will be used for all subsequent monitoring periods. To use measurements of the CO₂ content of biogas to calculate the methane content instead of directly measuring the methane content is required due to the project participants initially not finding reliable and durable equipment for measuring methane at its project activities. Hence, a request for deviation is suitable in accordance with paragraph 212 of the Validation and Verification Manual (Version 01.2).

Please use the space below to describe the impact of the deviation on the estimates of the emissions reductions for the proposed project activity with the use of approved methodology as existing and with the deviation. Please substantiate the estimations with relevant and verifiable data.

The deviation is expected to result in an underestimation of the emission reductions as it is conservatively assumed that biogas contains 6% trace gases.

Link to the monitoring report

<https://cdm.unfccc.int/Projects/DB/TUEV-SUED1152306613.98/iProcess/BVQI1320221829.56/view>

If necessary, list attached public files containing relevant information which is not available through the above link

MX38 95th percentile.xls (confidential)