
ASSESSMENT OPINION FOR POST REGISTRATION CHANGES

Project Title :

**Ratchaburi Farms Biogas Project
at Veerachai Farm**

(UNFCCC Registration Ref. No. 1554)

Report No.: SQAS-CDM-ED03730013-1

Date : 19 October 2015

Project title :	Ratchaburi Farms Biogas Project at Veerachai Farm
UNFCCC Project No.:	1554
Client :	Danish Energy Agency
Report No.:	SQAS-CDM- ED03730013-1

Section 1 : Type of post registration change	Please tick whichever is relevant
1. Corrections (refer to Section 3)	<input type="checkbox"/>
2. Temporary deviations from the registered monitoring plan or applied methodology (refer to Section 4)	<input checked="" type="checkbox"/>
3. Permanent changes from the registered monitoring plan or applied methodology (refer to Section 5)	<input type="checkbox"/>
4. Changes to the project design of a registered project activity (refer to Section 6)	<input type="checkbox"/>
5. Changes to the start date of the crediting period (refer to Section 7)	<input type="checkbox"/>

Section 2 : For the above post registration change, is prior approval required from EB? If no, please provide justification.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Justification on why prior approval not required: The temporary deviations do not require prior approval as the deviations were in accordance with paragraph 2 and 3 of Appendix 1 of CDM Project Standard version 07.0.	

Section 3 : Correction
3.1 Detailed the correction made in the PDD. Not applicable.
3.2 Confirm that the corrected information is an accurate reflection of actual project information Not applicable.
3.3 Confirm that the corrected parameters are in accordance with the applied methodology and/or selected monitoring plan. Not applicable.

Section 4 : Temporary deviations from the registered monitoring plan or applied methodology

4.1 Describe the temporary deviation.

There are two deviations found:

Deviation no. 1:

The fraction of methane destroyed (i.e. the flare efficiency) used by the project activity is reported as 0% for the period between 1 April 2011 and 30 April 2014. The parameter is applied in the calculation of project emission from "methane captured and not flared (E_{flare})".

Deviation no. 2:

For the period from 18 January 2013 to 8 April 2013, baseline emission has been considered as zero and the methane content in biogas (f_{G,CH_4}) was set at 100% for project emission calculation.

4.2 Provide the reason(s) for requesting the deviation from provisions of registered monitoring plan or applied methodology.

Deviation no. 1:

During this monitoring period i.e. from 1 April 2011 to 30 April 2014, there was no flame detector installed in the project activity and flaring of the biogas was carried out. It is therefore not possible to determine the flare efficiency as required by the monitoring plan.

Deviation no. 2:

No calibration carried out for methane analyser (S/N 772020050RN) which was used in the project activity from the start of this monitoring period until 8 April 2013. The methane analyser was due for calibration on 18 January 2013. However, no calibration was carried out and the unit was replaced with a new calibrated analyser (S/N 2Z7030004RN) on 9 April 2013. Subsequently, the old analyser (S/N 772020050RN) was found to be faulty and calibration was not possible.

4.3 Describe why 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

Deviation no. 1:

The project participant has planned to install the flame detector to the flare by 30 October 2015.

Deviation no. 2:

The methane content in biogas has been monitored with a new calibrated analyser since 9 April 2013.

4.4 Describe how the deviation likely to lead to a reduction in the accuracy of the calculation of emission reductions. Ensure that conservative assumptions or discount factors to the calculations to the extent required to ensure that emission reductions will not be over-estimated as a result of the deviation have been applied.

Deviation no. 1:

"Flare efficiency" was considered as 0% from 1 April 2011 to 30 April 2014. This action has resulted in maximum value of " E_{flare} " which lowered the total emissions reduction for the project activity.

Deviation no. 2:

Baseline emission was not claimed from 18 January 2013 to 8 April 2013 and for project emission, " E_{flare} " the methane content was taken as 100%. This approach reduced the baseline emissions, increased the project emissions and finally generates lower emissions reduction for the project activity.

4.5 Describe the exact period to which the deviation applies

Deviation no. 1:

1 April 2011 to 30 October 2015.

Deviation no. 2:

18 January 2013 to 8 April 2013.

Section 5 : Permanent changes from the registered monitoring plan or applied methodology

5.1 Description of the revision of the monitoring plan

Not applicable.

5.2 Assessment of the revision of the monitoring plan :

5.2.1 The proposed revision of the monitoring plan ensures that the level of accuracy or completeness in the monitoring and verification process is not reduced as a result of the revisions

Not applicable.

5.2.2 The proposed revision of the monitoring plan is in accordance with the approved monitoring methodology applicable to the project activity whilst ensuring the conservativeness of the emission reductions calculation

Not applicable.

5.2.3 The findings of previous verification reports, if any, have been taken into account

Not applicable.

Section 6 : Changes to the project design of a registered project activity

6.1 Description of the changes as compared to the description in the registered PDD and description of the changes to the monitoring plan

Not applicable.

6.2 Assessment of the changes to the project design

6.2.1 Assessment of when the changes occurred

Not applicable.

6.2.2 Assessment of the reasons for these changes taking place

Not applicable.

6.2.3 Assessment of whether the changes would have been known to the project participants prior to registration of the project activity

Not applicable.

6.2.4 Assessment of how the changes may impact the overall operation/ability of the project activity to deliver emission reductions as stated in the PDD

Not applicable

6.3 An assessment regarding whether the changes would adversely affect the conclusions of the validation report of the registered PDD with regard to:

6.3.1 Additionality of the project activity

Not applicable.

6.3.2 Scale of the project activity

Not applicable.

- 6.3.3 Applicability and application of approved baseline methodology under which the project activity has been registered or the later version of the applied methodology;**
Not applicable.
- 6.3.4 The compliance of the monitoring plan with the applied monitoring methodology**
Not applicable.
- 6.3.5 The level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan**
Not applicable.

Section 7 : Changes to the start date of the crediting period

- 7.1 Indicate the new start date**
Not applicable.
- 7.2 Assessment on the following :**
- 7.2.1 No changes have occurred to the project activity that would result in a less conservative baseline, and**
Not applicable.
- 7.2.1 Substantive progress has been made by the project participants to start the project activity**
Not applicable.

Section 8 : Validation Opinion

The appointed SIRIM QAS Intl. verification team, during their verification of the CDM project activity "Ratchaburi Farms Biogas Project at Veerachai Farm" identified that the monitoring of the fraction of methane destroyed and the methane content in biogas had deviated from the requirements stipulated in the monitoring plan of the approved PDD version 6 dated 2 February 2012.

Consequently, the verification team had carried out an assessment of the deviation and its impact on the level of accuracy or completeness in the monitoring and verification process. The verification team confirms that the identified deviation does not affect the accuracy of the calculation of the emission reductions as a conservative approach has been used in accordance with that specified in paragraph 2 and 3 of Appendix 1 of CDM Project Standard version 07.0.

In conclusion, SIRIM QAS Intl. confirms that the deviations are in accordance with provisions given in the CDM Project Standard and do not require prior approval by the Board.

Work carried out by :



(Aernida Abdul Kadir)
Verification Team Leader

Work approved by :



(Parama Iswara Subramaniam)
DOE Representative