



CDM: Recommendation Form for Small Scale Methodologies (version 01)
(To be used for presenting questions/proposals/amendments to the simplified methodologies for small-scale CDM project activity categories)

<i>Date of SSC WG meeting:</i>	15–18 June 2010, SSC WG 26
<i>Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):</i>	Clarification on the applicability of AMS-III.F and AMS-III.H to waste water pulp treatment in one digester and the applicability of AMS-III.H to Greenfield projects
<i>Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.</i>	AMS-III.F (Version 08) “Avoidance of methane emissions through controlled biological treatment of biomass” and AMS-III.H (Version 14) “Methane recovery in wastewater treatment”
<i>Name of the authors of the query:</i>	Christine Clashhausen Institution: EnBW Energie Baden-Württemberg AG c.clashhausen@enbw.com

Summary of the query:

Please use the space below to summarize the query related to SSC methodologies/categories SSC Modalities and Procedures provide recommendation/analysis of the SSC WG.

Original text from PP:

We kindly ask for clarification regarding the following project activities.

PROJECT A

Project background:

The project activity aims treating pulp and waste water from an agro-industrial process. Waste water and pulp constitute biomass residues with high organic contents. Both accrue in the food industry, in detail in the starch industry. Pulp accrues in the extraction of starch from cassava roots. It is a 100% organic material (mixed with water) and can be categorised as food industry waste. At the project site, the pulp dry matter content is around 15% (**please find attached a detailed analysis of pulp**). The disposal is in deep holes in uniform fraction not mixed with other materials. The disposal site would be classified as dumpsite (SWDS).

The treatment of both residues in the baseline scenario is different. The baseline scenario for waste water is the treatment in an open anaerobic lagoon system. The baseline for the pulp is the decay on a dumpsite.

The project activity is the co-fermentation of wastewater and pulp in one anaerobic digestion system (biogas plant). The biogas plant will be introduced as sequential stage in the existing open anaerobic wastewater lagoon treatment system.

The project activity treatment system will most likely result in a higher methane conversion factor (MCF) than the treatment systems used in the baseline situation. The amount of biogas recovered can only be monitored as one stream and can not be allocated to each of the two substrates (pulp and waste water).

All biogas recovered shall be used for electricity generation and exported to the national grid applying AMS-I. D.

Questions:

Regarding AMS-III. F.

- a) Is pulp covered under biomass waste from agro-industrial activities according to paragraph 4?
- b) Is the classification of pulp as solid waste and the classification of the disposal site as dumpsite applicable?
- c) Project activity would apply for AMS-III.F. paragraph 1 b). According to paragraph 6 of AMS-III.F. co-treatment of waste water is applicable, too. In the following of the methodology the co-treatment of waste water is described as co-composting (see paragraph 17, 20e): We would like to clarify if the co-treatment of waste water in an anaerobic digester is applicable under AMS-III.F. ?
- d) In case question c) is positive answered (i.e. AMS-III.F. applicable for treatment of pulp and waste water in one anaerobic digester) is the baseline of waste water co-treatment estimated according to formula 2?

Regarding AMS- III. H.

- e) Pulp has a dry matter content of around 15% and might be seen as wastewater or sludge. We would like to know, if pulp can be interpreted as sludge under AMS-III.H. ?
- f) If pulp is considered as sludge which scenario of paragraph 1 should be applied?
- g) In case treatment of pulp as co-treatment is not applicable under AMS-III.H.; we would like to know if the project activity can be implemented as described (treatment of waste water and pulp in one digester) and if emission reductions can be claimed for the waste water treatment component applying AMS-III.H. disregarding baseline emissions from the treatment of pulp?
- h) In case question g) is positive answered (i.e. pulp is not applicable under AMS-III.H.) is there any impact on emission reductions from electricity generation using the recovered biogas, which will be fed into the national grid (according to AMS I.D)?

PROJECT B**Project background:**

At an existing agro-industrial facility a waste water stream is currently discharged without any treatment (scenario (v) of paragraph 1 of AMS III.H version 14). In order to comply with the waste water regulations in the Sub-Saharan African host country a wastewater treatment plant has to be built, which will be most likely an anaerobic open lagoon treatment system. Instead of such a lagoon the project developer intends to build a system with biogas recovery.

Questions:**Regarding AMS- III. H.**

- i) Are the provisions for Greenfield projects (included in the methodology and in the General Guidance for SSC methodologies) applicable to the new to build waste water treatment plant although the agro-industrial facility itself already exists?
- j) Can scenario (iv) (see paragraph 1 of the methodology) be deemed to be the baseline scenario if it is identified according to the General Guidance for SSC methodologies (Paragraph 14. Type II and II Greenfield projects)?

Further information from the project proponent:**Currently, the pulp**

- 1) is a by-product of starch processing. (see ppt)
- 2) the pulp is first dumped next to the starch factory (approx. 2-3 days)(no other material is added to pulp)
- 3) transported (max. 1 km) by trucks to open lagoons
- 4) the lagoons are digged in order to dump pulp as there is neither a market anymore nor another use

explanation to lagoons:

In general lagoons can be very different in shape and scale. In one of our projects the lagoons are approx. 100m(length) x 35m (width) x 5,5m (depth).

The bottom of the lagoons are not sealed just compacted. The water of the pulp does trickle away (into the soil) and evaporate (into the atmosphere). The lagoons do not have any outflow!

Recommendation by the SSC WG:

Please use the space below to provide amendments/change (in your expert view, if necessary).

Please refer to paragraph 21 of the meeting report of the SSC WG 26
<http://cdm.unfccc.int/Panels/ssc_wg>.

Answer to authors of query by the SSC WG:

Please use the space below to provide answer to the authors of the above query.

The small-scale working group of the CDM Executive Board would like to thank the author for the submission.

The SSC WG, as well as taking into account further information provided by the project proponent, agreed to clarify that

With respect to project B:

- The wastewater treatment plant that is going to be constructed which will treat the wastewater generated from an existing facility can be considered as Greenfield. The relevant provisions for Greenfield projects contained in AMS-III.H as well as the “General Guidelines to SSC methodologies” shall be followed, i.e. the baseline of the underlying Greenfield project shall be identified by following the relevant procedures in the “General Guidelines to SSC methodologies”, in which the consideration of local regulation during the assessment of various alternatives is also covered.

With respect to project A:

- The pulp can be considered as solid biomass waste generated from agro-industrial activities covered in paragraph 4, AMS-III.F, version 8;
- The “deep hole” as described in the additional information provided, can be considered as solid waste disposal site;
- As clarified above, in principle AMS- III.F is applicable for co-digestion of pulp and wastewater, however the following adaptation will be required:
 - AMS-III.F, as currently written, is mainly intended for solid waste treatment with limited quantity of wastewater (co-composting) instead of anaerobic treatment of large quantity of wastewater. Hence equation 2 in AMS-III.F, which is based on the untreated COD, may not lead to a conservative baseline emission calculation for the described project. Please consider proposing a revised equation based on COD removed. Methods of AMS-III.H which are based on COD removed may be followed for guidance;
 - Since the project activity may involve treatment systems with higher methane conversion factors (MCF) or higher efficiency than the baseline treatment systems, please consider proposing a method to take into account such a difference in MCF. The approach in AMS-III.H (version 14, paragraph 31) may be considered for guidance.

The project proponent is invited to submit a request for revision of AMS-III.F, taking into account the above issues.

The proposed revision shall be submitted on or before 16 July 2010 GMT in order to be considered at SSC WG27, <please see the relevant procedures at <http://cdm.unfccc.int/methodologies/SSCmethodologies/clarifications>>.

Signed by the Chair, Mr. Peer Stiansen

Date: 18/06/2010

Signed by the Vice-Chair, Mr. Hugh Sealy

Date: 18/06/2010

Information to be completed by the secretariat

SSC-Submission number	SSC_423
Date when the form was received at UNFCCC secretariat	18 June 2010
Date of transmission to the EB	18 June 2010
Date of posting in the UNFCCC CDM web site	18 June 2010