



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)

Date of SSC WG meeting:	29 April–02 May 2009, SSC WG 20
Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):	Applicability of composting technologies for animal manure treatment for avoiding methane emissions
Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.	
Name of the authors of the query:	Thiago Othero Institution: Amazon Carbon S/S Ltda. thiago@amazoncarbon.com.br

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:

The project participant is aware of a treatment system that composts animal manure, thus avoiding methane emissions. In the baseline scenario, animal manure is typically treated in anaerobic systems in accordance with AMS.III.D and AMS.III.Y, for instance. During the project activity, all manure is treated in such technology eliminating the need of using anaerobic systems, such as anaerobic lagoons.

In the view of the project participants, the following issues prevent the use of the bellow methodologies:

- AMS.III.D: The technology/measure in question is in accordance with paragraphs 1 and 2 of this methodology and baseline emissions could be calculated by the same procedures described in paragraphs 9 to 16. This methodology, however, is only applicable for project activities where methane recovery and destruction by flaring/combustion or gainful use of the recovered methane takes place.
- AMS.III.I: The technology/measure in question is in accordance with paragraphs 1 of this methodology and baseline emissions could be calculated by the same procedures described in paragraphs 4 to 12. However, since the composting process evaporates a significant portion of the water content of the manure, there would not be a *wastewater* in the project scenario. Hence, methane emissions during the treatment of the wastewater in biological aerobic wastewater treatment systems ($PE_{ww,treatment,y}$) and methane emissions from degradable organic carbon in treated wastewater discharged in sea/river or lake ($PE_{ww,discharge,y}$) would not be applicable. Project emission could be calculated according to equation (12), emissions from composting of sludge:

$$PE_{s,treatment,y} = \sum_l S_{l,PJ,y} * EF_{composting} * GWP_{CH4}$$

In such case, all animal manure would be considered as sludge and monitored accordingly.

- AMS.III.Y: The technology/measure in question is in accordance with paragraphs 1 of this methodology and baseline emissions could be calculated by the same procedures described in

paragraphs 13 to 17. However, the treatment system does not include solid separation, as all manure (both liquid and solid fractions) is treated by composting.

The manufacturer of the technology is of the view that methane emissions are truly avoided, based on the system's principles and the actual operation of this technology for the treatment of animal manure. In such technology, anaerobic conditions are avoided by mechanical mixing of the manure, by constant evaporation of the liquid fraction due to the high temperature of the compost (ranging from 45 to 65 Celsius degrees) and by a reflux system that collects the excess of liquids in the manure. Organic substrate is added to the manure to improve composting efficiency.

Considering the above, the project participant is seeking clarification on how to apply this technology for CDM projects. Is it possible to adopt any of the currently available small scale methodologies, perhaps with a request for deviation? Or, should we consider proposing a new methodology?

Recommendation by the SSC WG:

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

Please refer to paragraphs 25 and 32 of the meeting report of the SSC WG 20 (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, taking into account this input together with other submissions, is working on a revised draft AMS-III.F that includes activities shifting from existing anaerobic manure management systems to manure composting in new or upgraded facilities with a view to finalise it at the next meeting.



Signature of SSC WG Chair

(Hugh Sealy)

Date: 02/05/2009



Signature of SSC WG Vice-Chair

(Peer Stiansen)

Date: 02/05/2009

Information to be completed by the secretariat

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