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):	Clarification on emission factor to estimate project methane emissions during composting in AMS-III.F
Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.	AMS-III.F/Version 06
Name of the authors of the query:	Mr. Ashwini Malhotra Institution: Ecovalley Farms and Foods Limited ashwini_malhotra@weikfield.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:

The project activity involves increase of capacity utilisation of an existing aerobic composting facility followed with expansion in capacity of the same facility. This will result in avoidance of methane emissions, which in the baseline would have happened due to anaerobic decay of wastes. As per the guidance of AMS IIIF/Version 06, the baseline emissions are computed considering the total quantity of raw wastes treated under the project activity following the formulae in 'Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site'/Version 04. It is to be noted that the baseline emissions formula follows an exponential decay model and the baseline emissions also are calculated exponentially. The baseline emissions are lower for the initial years of the crediting period and they increase exponentially in the latter years as the emissions for the earlier year are added on to the emissions for the latter year.

The methodology AMS IIIF provides the following formula for calculating project emissions.

$$PE_y = PE_{y,transp} + PE_{y,power} + PE_{y,phy\ leakage} + PE_{y,comp} + PE_{y,runoff} + PE_{y,res}$$

The parameter $PE_{y,comp}$,*i.e.* methane emissions during composting process in the year y (tCO_2e) has been recommended by the methodology to be a constant value of $4gCH_4$/kg waste (IPCC) treated on a wet weight basis in the year y. The project participant interprets this parameter to account for the CH_4 emissions due to certain degree of anaerobicity involved in the aerobic composting process in each year of the crediting period. However, this constant value for each year appears to be inconsistent with the baseline emissions formula which is an exponential one. The result of this apparent inconsistency is that in the first few years of the crediting period (specifically for this project the 1st and 2nd years) the baseline emissions are lower than the constant project emissions during composting in those years (as per the exponential baseline emissions formula). The emission reductions work out to be negative. This is not a feasible situation as the composting process is primarily aerobic. There might exist some degree of

anaerobicity in the composting (as no process is absolutely ideal). However this degree of anaerobicity should not be higher than degree of aerobicity involved in an aerobic composting process. The project participant is also attaching the CER calculation sheet in which the emission reductions have been computed based on the formulae in the methodology AMS III.F./Version 06.

The query raised for this discrepancy in calculation is a revision of the $EF_{composting}$ value which needs to be an exponential factor in line with the baseline emissions formula so as to correctly account for the CH_4 emissions for a certain degree of anaerobicity in the aerobic process, over the successive years in the crediting period under consideration.

The project participant requests the SSC-WG to provide clarification to the above inconsistency.

Recommendation by the SSC WG:

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

Please refer to paragraph 31 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

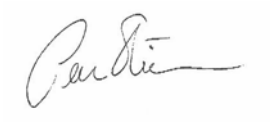
The small-scale working group of the CDM Executive Board would like to thank the author for the submission.

Taking into account this and other related submissions, the SSC WG agreed to recommend a revision of AMS-III.F to provide more guidance regarding the calculation of project emissions from the compost, taking into account specific characteristics of the composting technology/measure employed, i.e., under what circumstances $EF_{composting}$ can be ignored in the calculation of project emissions.

Signature of SSC WG Chair ……..

(Hugh Sealy)

Date: 02/05/2009



Signature of SSC WG Vice-Chair ……..

(Peer Stiansen)

Date: 02/05/2009

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