

Comments for the

Call for input on the draft revision of the methodology AMS-III.G "Landfill methane recovery"  
(from 14 May to 11 June 2012)

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### **Comment 1:**

The newly introduced equation (1) at paragraph 7, introduces the parameter  $OX_{top\_layer}$ , described as "Fraction of methane in the LFG that would be oxidized in the top layer of the SWDS in the baseline (dimensionless)".

$$BE_y = (1 - OX_{top\_layer}) * (\eta_{PJ} * BE_{CH_4,SWDS,y} - F_{CH_4,BL,y} * GWP_{CH_4})$$

In this equation,  $BE_{CH_4,SWDS,y}$  is to be calculated according to equation (1) of the methodological tool "Emissions from solid waste disposal sites", where it is expressed as:

$$\left. \begin{array}{l} BE_{CH_4,SWDS,y} \\ PE_{CH_4,SWDS,y} \\ LE_{CH_4,SWDS,y} \end{array} \right\} = \varphi_y \cdot (1 - f_y) \cdot GWP_{CH_4} \cdot (1 - OX) \cdot \frac{16}{12} \cdot F \cdot DOC_{f,y} \cdot MCF_y \cdot \sum_{x=1}^y \sum_j W_{j,x} \cdot DOC_j \cdot e^{-k_j(y-x)} \cdot (1 - e^{-k_j})$$

In this equation there is the parameter  $OX$ , which is described as "Oxidation factor (reflecting the amount of methane from SWDS that is oxidised in the soil or other material covering the waste)".

Once the equation (1) of the tool is substituted in equation (1) of the proposed version of AMS-III.G, it looks like the factor  $OX / OX_{top\_layer}$  is double counted, as these 2 parameters seems to have the same meaning, but with different denomination and included twice in the calculation of  $BE_y$ . Either the methodology or the tool has to be adjusted to remove the double counting (and possibly consistent terminology should be adopted).

### **Comment 2:**

This comment reiterates the clarification requested by the same author to the SSC WG on 08/05/2012 (reply provided on 09/05/2012 by SSC WG, saying to provide comment via this call).

In the newly introduced equation (1) at paragraph 7, the parameter  $F_{CH_4,BL,y}$  replaces  $MD_{reg,y}$  and the calculation of such parameter has to follow relevant procedure in ACM0001.

In ACM0001, calculation of  $F_{CH_4,BL,y}$  is differentiated into 4 cases, depending on the requirements to destroy captured methane and on the existence of a LFG capture system. The requirements, however, refer only to existing laws or regulations, without taking into account their actual level of enforcement in the host country. This aspect is usually discussed in the context of the baseline identification, from which it may result that, despite there is a regulation in place for LFG capture and flaring, it can be proven that this regulation is widely not enforced in the host country and the regulation has no effect in practice.

The question is, whether or not the concept of widespread non compliance is to be applied to the determination of  $F_{CH_4,BL,y}$ . Without taking into account the actual enforcement of the regulation, the procedure for calculation of  $F_{CH_4,BL,y}$  brings to absurd results: for example, in a country where LFG regulation exists and prescribes 100% of LFG to be captured and destroyed (and there is no LFG capture system at the project site),  $F_{CH_4,BL,y}$  results to be equal to  $F_{CH_4,PJ,y}$  (case 2 in ACM0001) and therefore, according to equation 4 in AMS.III.G (where  $MD_y$  has the same meaning of  $F_{CH_4,PJ,y}$ ) there are zero emission reductions. But, if in the country there is widespread non compliance with

the regulation (and such baseline scenario is validated to be the most likely scenario), it is clear that a project implementing flaring/use of LFG will cause factual emission reductions.

In its effect, not considering the actual enforcement as well discriminates against poor host countries that would be willing to enforce the policy, but lack the infrastructure and resources to do so.

In conclusion, it is requested to clarify in the methodology that  $F_{CH_4, BL, y}$  must be established according to the procedure in ACM0001 but by also taking into account the specific baseline scenario identified for the project, i.e. the actual enforcement of the regulation, rather than using the theoretical but not enforced values of the regulation.

Incidentally, it would be useful to keep the same terminology in ACM0001 and AMS.III.G, given that parameters are now cross-referred (e.g.  $MD_y$  in AMS.III.G is the same as  $F_{CH_4, PJ, y}$  in ACM0001)