



**Approved baseline and monitoring methodology/  
methodological tool clarification response form  
(Version 02.0)**

**INFORMATION TO BE COMPLETED BY THE SECRETARIAT OR PANEL/WG**

<b>Date and number of Panel/WG meeting:</b>	26–29 August 2013, SSC WG 41
<b>Title/Subject of the request for clarification:</b>	Clarification on the ex-post calculation of emission reductions in AMS-III.H
<b>Reference number of the request for clarification:</b>	SSC_688
<b>Exact reference (number, title and version) of the methodology or methodological tool to which the request for clarification applies:</b>	AMS-III.H – version 16 “Methane recovery in Wastewater Treatment”
<b>Fast track or Regular track:</b>	<input type="checkbox"/> Fast track <input checked="" type="checkbox"/> Regular track

**Summary of the request for clarification**

Original text from PP:

PT. Musim Mas is the project participant of Project 4480: Methane Recovery and Utilization at PT. Musim Mas Palm Oil Mill in Pangkalan Lesung, Riau Indonesia.

We would like to seek clarification regarding the latest approved methodology AMS.III.H version 16.0, Equation 2, determination of methane emissions from the baseline wastewater treatment systems affected by the project activity.

$$BE_{ww,treatment,y} = \sum_i (Q_{ww,i,y} * COD_{inf low,i,y} * \eta_{COD,BL,i} * MCF_{ww,treatment,BL,i}) * B_{o,ww} * UF_{BL} * GWP_{CH4}$$

The clarification seeks to understand whether the “ex-post value” or the “ex-ante value” is to be applied for the COD removal efficiency ( $\eta_{COD,BL,i}$ ) for the methane emission reduction calculations used in the project activity.

Paragraph 33 and 34 of the methodology stated that:

Quote

*33. Ex post emission reductions shall be determined for case 1 (a) and 1 (e) as per paragraph 36. For cases 1 (b), 1 (c), 1 (d) and 1 (f), ex post emission reductions shall be based on the lowest value of the following, as per paragraph 34:*

*(i) The amount of biogas recovered and fuelled or flared (MDy) during the crediting period, that is monitored ex post;*

*(ii) Ex post calculated baseline, project and leakage emissions based on actual monitored data for the project activity.*

*34. For cases 1 (b), 1 (c), 1 (d) and 1 (f): it is possible that the project activity involves wastewater and sludge treatment systems with higher methane conversion factors (MCF) or with **higher efficiency** than the treatment systems used in the baseline situation. Therefore the emission reductions achieved by the project activity is **limited to the ex post calculated baseline emissions minus project emissions using the actual monitored data for the project activity.***

Unquote

In the case of project 4480 the COD removal efficiency is higher than in the baseline situation because the project activity added a new covered anaerobic digester pond with ± 120 days of retention capacity. Therefore, following Paragraph 33 and 34, it is our understanding that the ex-post value for COD removal

efficiency and not the *ex-ante* predetermined value in the PDD, should be used for the determination of  $BE_{ww,treatment,y}$  in the project activity. Is that correctly understood?

Your clarification on which value is to be used will be much appreciated. We look forward to your early reply.

#### Clarification by the secretariat or Panel/WG

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

The SSC WG agreed to clarify that for projects that involve retrofit of existing treatment facilities (for Greenfield projects as indicated in paragraph 12 of AMS-III.H, version 16 different requirements may apply), chemical oxygen demand (COD) removal efficiency ( $\eta_{COD,BL,i}$ ) of the baseline wastewater treatment system, i.e. before the introduction of project technology/measure, shall be used for the emission reductions calculation of the project activity.

The increased COD removal efficiency from project activity is not appropriate to use, because the additional COD removal after the introduction of project technology/measure leading to increased Greenhouse gases (GHG) emissions may not have occurred in the baseline or it is also possible that the incremental COD removed would have been treated in a different systems with different methane correction factor (MCF).

With respect to paragraph 34 of AMS-III.H, version 16, the requirement of ex post monitored data application for ex post calculation in equation 2 (e.g. parameter  $Q_{ww,i,y}$ ), shall not be read as if it suggests the use of project system efficiency for parameter  $\eta_{COD,BL,i}$ . In addition, parameter  $\eta_{COD,BL,i}$  (per its definition in equation (2)) is determined by following paragraph 26-28, which are all referring to use of baseline system efficiency during project (please refer to paragraph 27(a) specifically). Finally, subscript of parameter  $\eta_{COD,BL,i}$  also does not include “y”, due to the same reason that efficiency of the baseline system and not project system shall be used.

The SSC WG noted that the clarity of paragraph 34 could be further improved and agreed to reflect the above clarification at the next opportunity of revising AMS-III.H.

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#### Document information

Version	Date	Description
02.0	18 July 2013	Revised to remove the row “Date and signature of the chair and vice chair of Panel/WG”.
01.0	4 July 2013	Initial publication. This document supersedes and replaces the following documents: <ul style="list-style-type: none"> <li>• Recommendation Form for Small Scale Methodologies (F-CDM-SSCwg) (Version 01.1);</li> <li>• Recommendation Form for Small Scale A/R Methodologies and Procedures (F-CDM-SSC-AR) (Version 01.1).</li> </ul>
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