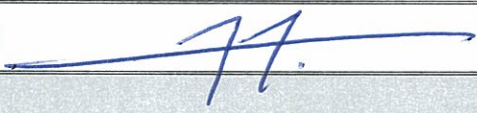
 <p align="center">CDM: Form for submission of queries from DOEs to the Methodologies Panel regarding the application of approved methodologies (version 01) <i>(To be used by DOEs for presenting questions / proposals / amendments related to the applicability of approved methodology)</i></p>	
Name of the entity (DOE) submitting this form	Ernst & Young et Associés
Reference number and title of the approved methodologies	AR-AMC0001 – version 3 Approved consolidated afforestation and reforestation baseline and monitoring methodology - "Afforestation and reforestation of degraded land" (Version 03)
Title/Subject (give a short title or specify the subject of your submission, maximum 200 characters):	Ex post estimations of soil organic carbon Does the default method described in the above-mentioned approved methodology is the only method to be used for ex post estimations of soil organic carbon ?
Attach CDM-PDD example of project activity where applicability raises problem:	X Yes, is attached.
Date and signature for the DOE	11/01/2010 
<p>Submitted queries</p> <p>Please use the space below to substantiate the queries relating to the application of approved methodologies. If the questions are related to a project activity under development or implementation, please describe the context in which they arose. If you are proposing amendments to existing methodologies, please specify the text you want to change or introduce. If necessary, attach files or refer to sources of relevant information.</p> <p>If you have a question relating to the application of an approved methodology, please specify and provide reference to the exact project activity to which it applies.</p> <p>>></p>	

If you propose an amendment to an approved methodology, please provide reasons.

Section 5.1.4. of the approved methodology AR-AMC001-version 3 give the following guidance concerning the ex post estimations for changes in the soil organic pool :

5.1.4 Soil Organic Carbon (if selected in Table 1)

For *ex ante* estimations, the changes in stocks of soil organic carbon may be assessed using the default method or the changes shall be conservatively neglected.

For *ex post* estimations, the changes in stocks of soil organic carbon may be assessed using the default method as described below.

5.1.4.1 Default method

A/R CDM project activities may account for changes in soil organic carbon pool using a default approach in areas of land included in their boundary which satisfy all conditions listed below:

- (i) The area does not include organic soils (e.g., peat-lands), or wetlands;¹¹
- (ii) Removal of existing vegetation during site preparation for the A/R CDM project activity shall not occur on more than 10% of the area, unless it can be demonstrated that land clearance, e.g., by slash-and-burn activities, is a common practice in the region in which the project is located;
- (iii) Litter shall remain on site and not be removed;
- (iv) Ploughing/ripping/scarification associated with site preparation for planting, seeding and/or the human-induced promotion of natural seed sources, shall not exceed 10% of the project area (during each occasion);
- (v) If ploughing/ripping/scarification is used for site preparation, it shall follow the land contour.

If a part of an area of land included in the project boundary satisfies all conditions (i)-(v) listed above, the part shall be included in accounting of the default changes in the soil organic carbon pool.

The default *ex ante* and *ex post* changes in the soil organic carbon pool $\Delta C_{d,SOC_i}$ shall be estimated using the following equation:

$$\begin{aligned} \Delta C_{d,SOC_i} &= A_i \cdot \Delta C \text{ for } 0 < t \leq t_{equilibrium} \\ \Delta C_{d,SOC_i} &= 0 \text{ for } t > t_{equilibrium} \end{aligned} \quad (29)$$

where:

$\Delta C_{d,SOC_i}$	Annual change in carbon stock in soil organic matter for area of land <i>i</i> , for year <i>t</i> ; t C yr ⁻¹
A_i	Area of land <i>i</i> that satisfies all conditions (i)-(iv) listed above; hectare (ha)
ΔC	Default annual increase in carbon stock in soil organic carbon; t C ha ⁻¹ yr ⁻¹
$t_{equilibrium}$	Time until a new equilibrium in carbon stock in soil organic matter is reached in area of land <i>i</i> ; years

The default values of $\Delta C = 0.5 \text{ t C ha}^{-1} \text{ yr}^{-1}$ and $t_{equilibrium} = 20$ years shall be used. Changes in carbon stock in soil organic matter shall not be monitored *ex post*.

Our request for clarification is the following one :

- What do happen if a part of the project area does not satisfy all the conditions (i) to (v) listed in the default method approach ?

Our understanding of this section of the methodology is the following one :

- For *ex post* estimations of changes in the soil organic carbon pool, one can use the default method described in section 5.1.4.1. if the applicability conditions (i) to (v) of the default method are satisfied. In this case, changes in carbon stock in soil organic matter shall not be monitored ;
- If those applicability conditions are not satisfied, then an approach recommended by the IPPC must be used and changes in carbon stock in soil organic matter must be monitored.

Our understanding is based on the following arguments :

- The applicability condition (iv) of the default method can potentially be in contradiction with the applicability conditions of approved tool "Procedure to determine when accounting of the soil organic carbon pool may be conservatively neglected in A/R CDM project activities" which has to be used in this methodology and the fact that in this methodology Soil Organic Carbon pool can be alternatively selected or not
- Section 3 "Data and parameters monitored" of the approved methodology mentions the parameters that should be monitored during the project activity. In this list, soil organic carbon of the sample plot p in stratum i , time t is mentioned to be monitored and used in equation (29) of the approved methodology. This fact seems to show that soil organic carbon pool could be monitored, and should be monitored if the conditions (i) to (v) of the default method are not satisfied, otherwise this parameter wouldn't have been in the list of parameter to be monitored, following the measurement procedures described below in this section of the methodology. Besides, this parameter has to be used in equation (29) whereas it doesn't appear in this equation.

Data / parameter:	$C_{SOC_{Sample,i,p,t}}$
Data unit:	g C/100 g soil
Used in equations:	29
Description:	Soil organic carbon of the sample in plot p in stratum i , time t
Source of data:	Determined in laboratory

Measurement procedures (if any):	<p>Step 1: The sample plots for soil sampling are selected taking into account the soil type, depth, and bulk density in the estimates.</p> <p>Step 2: Soil organic carbon shall be measured to a fixed depth (e.g., 30 cm) by collecting soil samples with a soil corer. The samples shall be collected from five locations within the plot.</p> <p>Step 3: Soil samples collected are aggregated to reduce the variability and sieved through 2 mm sieve, mixed and analyzed in the laboratory.</p>
Monitoring frequency:	
QA/QC procedures:	
Any comment:	

$$\Delta C_{d,SOC_t} = A_t \cdot \Delta C \text{ for } 0 < t \leq t_{equilibrium}$$

$$\Delta C_{d,SOC_t} = 0 \text{ for } t > t_{equilibrium}$$

(29)

- (iii) In the following sentence of the approved methodology - "For *ex post* estimations, the changes in stocks of soil organic carbon **may** be assessed using the default method as described below.", the verbal form "may" is used and not "shall"
- (iv) Finally, the numeration in the section seems to show that one section of the methodology is missing. Indeed, the section 5.1.4. is divided in section 5.1.4.1. Default method but bullet 5.1.4.2. doesn't exist

So, we believe that the answer to the question : "Does the default method described in the above-mentioned approved methodology is the only method to be used for *ex post* estimations of soil organic carbon ?" is "No" especially if the applicability conditions of the default method are not satisfied and that an alternative approach for *ex-post* estimations of changes of soil organic carbon is the one described in the section 3 of the methodology.

In case you propose the amendment to the approved methodologies, please provide your draft below, if not included in an annex:

>>

Date of submission of contribution:

Information to be completed by the secretariat

Date when the form was received at UNFCCC secretariat

Date of transmission to the Meth Panel and Executive Board