

REVIEW OF VM0010

Methodology Element Title	Methodology for Improved Forest Management: Conversion from Logged to Protected Forest	
Version	Version 1.1	
Methodology Element Category	Methodology	X
	Methodology Revision	
	Module	
	Tool	
Sectoral Scope(s)	14 - Agriculture, Forestry and Other Land Use	

Report Title	Review of VM0010
Assessment Criteria	<i>AFOLU Requirements, v3.3; Methodology Approval Process, v3.4</i>
Date of Issue	27 March 2013
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Summary:

The VCS Association reviewed VM0010 against Section 4.5.3 of the AFOLU Requirements, v3.2 (issued 1 February 2012) to determine whether VM0010 conformed to the new requirements. As a result of the review, the methodology was found to be non-conformant with the requirements for decay of dead wood and harvested wood products.

The methodology has been updated following the streamlined procedure described in Section 8.3.2 of the Methodology Approval Process, v3.4 and sets out criteria and procedures to reliably establish the pattern of carbon loss for the decay of dead wood and harvested wood products. The methodology applies the default approach for modeling the decay of each of these pools as given in the AFOLU Requirements. Specifically, the methodology has been updated so that dead wood generated during harvest follows a 10-year linear decay function and harvested wood products that are retired between 3 and 100 years follow a 20-year decay function.

1 ASSESSMENT FINDINGS

1.1 Definitions

Not applicable.

1.2 Applicability Conditions

Not applicable.

1.3 Project Boundary

Not applicable.

1.4 Procedure for Determining the Baseline Scenario

Not applicable.

1.5 Procedure for Demonstrating Additionality

Not applicable.

1.6 Baseline Emissions

Section 4.5.3 of the *AFOLU Requirements* requires methodologies to consider the decay of carbon in soil carbon, belowground biomass, dead wood and harvested wood products and shall not assume the immediate release of carbon from these pools in the baseline case.

- (1) This methodology does not include accounting for belowground biomass and soil carbon. No action is required for these pools.
- (2) For dead wood, in step 3.2, the methodology simplifies by assuming that dead wood created during timber harvest is emitted in the year of harvest. The methodology explicitly states that “the simplifying assumption is made that dead wood created during timber harvest is emitted in the year of harvest”. This is non-conformant to the *AFOLU Requirements*, section 4.5.3, which explicitly states that it shall not be assumed that GHG emissions from the dead wood pool occur instantaneously in the baseline case.

The methodology must set out criteria and procedures to reliably establish the pattern of carbon loss or apply an appropriate decay model for the decay of dead wood. A default approach for modelling the decay of both pools is given in the *AFOLU Requirements* and may be applied.

- (3) For wood products, in step 3.3, the methodology simplifies by assuming that all extracted biomass not retained in long-term wood products beyond 100 years is emitted in the first year of harvest. The methodology explicitly states that “carbon stocks treated here are those stocks remaining in wood products after 100 years... applying the simplifying

assumption that all extracted biomass not retained in long-term wood products after 100 years is emitted in the year of harvest". This is non-conformant to the *AFOLU Requirements*, section 4.5.3, which explicitly states that it shall not be assumed that GHG emissions from the medium-term harvested wood products pool occur instantaneously in the baseline case.

The methodology must set out criteria and procedures to reliably establish the pattern of carbon loss or apply an appropriate decay model for medium-term harvested wood products. A default approach for modelling the decay of both pools is given in the *AFOLU Requirements* and may be applied.

Where the default approach is applied in updating the methodology and the clarification is added, the methodology can be updated following the streamlined procedures as set out in section 8.3.2 of the *Methodology Approval Process*.

Developer Response:

- 1) In response to the non-conformance with Section 4.5.3(2) of the *AFOLU Requirements, v3.2*, VM0010 has been updated so that dead wood created during timber harvest follows a ten-year linear decay function.

This decay function is applied in section 8.1.5 when calculating the net greenhouse gas emissions in the baseline scenario on an annual basis. Specifically, equation 11 determines the emissions that occur from logging slash in the year of harvest, and equation 12 continues the linear decay function for years 2-10.

Note that naturally accumulated standing dead wood and lying dead wood have been excluded from the dead wood pool, as it is not conservative to include them in the baseline only, and it is conservative to assume that they are equivalent in the baseline and project scenario.

- 2) In response to the non-conformance with Section 4.5.3(4) of the *AFOLU Requirements, v3.2*, VM0010 has been updated to require the following:
 - Wood wastes (WW) along with the Short Lived Fraction (SLF) that are retired less than 3 years after harvest (calculated according to equation 7) are assumed to be emitted at the time of harvest.
 - The Additional Oxidised Fraction (OF) determines the amount of carbon stored in wood products that are retired between 3 and 100 years after harvest (calculated according to equations 8 and 9) and is accounted for according to a 20-year linear decay function.
 - All other wood products are considered to permanently store carbon, and VM0010 incorporates the assumption that sequestration is permanent and hence no carbon is released.

Decay functions are applied in section 8.1.5 which determines GHG emissions in the baseline

scenario on an annual basis. Specifically, equations 11, 12 and 13 have been updated so that the annualized calculations are based on carbon stock changes from year 1 ie, the time of harvest (equation 11), years 2-10 (equation 12) and years 11-20 (equation 13).

The factors derived from Winjum et al 1998 have also been updated to reflect that the short-term time period is defined as 0-3 years in the VCS *AFOLU Requirements* (as opposed to 0-5 years, as defined by Winjum et al 1998) and that the medium-term time period is defined as 3-100 years in the VCS *AFOLU Requirements* (as opposed to 5-100 years, as defined by Winjum et al 1998).

VCSA Response: The developer response adequately addresses the finding. No further action is required.

1.7 Project Emissions

Not applicable.

1.8 Leakage

Not applicable.

1.9 Quantification of Net GHG Emission Reductions and/or Removals

Not applicable.

1.10 Monitoring

Not applicable.

1.11 Data and Parameters

Not applicable.

1.12 Use of Tools/Modules

Not applicable.

2 ASSESSMENT CONCLUSION

The developer has provided sufficient responses to close all findings.