CORRECTIONS AND CLARIFICATIONS TO *VMD0055 ESTIMATION OF EMISSION REDUCTIONS FROM AVOIDING UNPLANNED DEFORESTATION, V1.1*

Publication date: 13 May 2026

This document provides corrections and clarifications applicable to *VMD0055 Estimation of Emission Reductions from Avoiding Unplanned Deforestation, v1.1.* Such corrections and clarifications are effective immediately for all registration requests and verification approval requests submitted after 13 May 2026. Project proponents and validation/verification bodies (VVBs) shall apply and interpret *VMD0055, v1.1* consistent with the corrections and clarifications set out in this document.

These updates will be incorporated into the next issued version of the methodology.

Correction/ Clarification	Description	Section Reference
Correction 1	The text has been amended to state that parameters for calculating leakage emissions beyond the leakage belt will be provided by Verra as part of the AD Baseline Allocation Report.	Section 5.1.4 Land Available for Activity-Shifting Leakage
Correction 2	Equation (36) has been removed.	Section 5.3.3.3 Estimation of Annual Emissions Caused by Unplanned Deforestation
Correction 3	Equation (37) has been removed.	Section 5.3.3.3 Estimation of Annual Emissions Caused by Unplanned Deforestation
Correction 4	Equation (41) has been corrected.	5.3.4.3 Emissions From Displacement of Geographically Constrained Activities in the

		UDef LB
Correction 5	Equation (43) has been corrected.	5.3.4.3 Emissions From Displacement of Geographically Constrained Activities in the UDef LB
Correction 6	Metadata tables corresponding to data and parameter values that must be updated at the time of baseline reassessment have been amended to make them consistent with the duration of the project baseline validity period.	Section 6.2 Data and Parameters Monitored
Correction 7	The list of items included in the *AD Baseline Allocation Report* has been amended to include the jurisdictional area potentially available for activity shifting outside the UDef LB.	Section A1.1 General
Clarification 1	The text has been edited to make the relationship between the duration of the jurisdictional and project baseline validity periods clearer, and to further clarify the options for projects that validate or transition to *VM0048* after the initial year of the jurisdictional baseline.	Section 5.3.1 Initial Project Baseline Validity Period (BVP) Under this Module
Clarification 2	Procedure for identifying forest degradation in the project area has been clarified.	Section 5.3.3.2 UDef PA and UDef LB Deforestation Data for the Monitoring Period
Clarification 3	The treatment of negative values potentially resulting from Equation (41) has been clarified.	5.3.4.3 Emissions From Displacement of Geographically Constrained Activities in the UDef LB
Clarification 4	The treatment of negative values potentially resulting from Equation (43) has been clarified.	5.3.4.3 Emissions From Displacement of Geographically Constrained Activities in the UDef LB

Clarification 5	Potential negative values for total leakage have been clarified.	Section 5.3.4.5 Estimation of Total Leakage from Displacement of Unplanned Deforestation
Clarification 6	Text has been amended to clarify that the total volume of GHG emissions due to leakage cannot exceed the volume of emissions avoided by the project.	Section 5.3.5 Net GHG Emission Reductions

1 CORRECTION 1

Correction:

Section 5.1.4 has been amended to state that parameters for calculating leakage emissions beyond the leakage belt will be provided by Verra as part of the AD Baseline Allocation Report, as follows:

> The spatial extent of land available for geographically mobile activity shifting will be defined by Verra following the criteria and procedures described in Section A2.1 of Appendix 2. The area potentially available for activity shifting outside the UDef LB ($A_{Available}$) and the area-weighted emission factor for activity shifting outside the UDef LB (ΔC_{OLB}) ~~This~~ will be provided by Verra to the project proponent upon receipt of ~~the~~ a completed AD Baseline Allocation Request Form.

Background:

The original text of Section 5.1.4 had inadvertently omitted this information.

2 CORRECTION 2

Correction:

Equation (36) has been removed as it is redundant.

Background:

Equation (36) was originally used as an intermediate calculation. This calculation was fully incorporated into Equation (39) in the final version of *VMD0055, v1.1*, making Equation (36) redundant.

3 CORRECTION 3

Correction:

Equation (37) has been removed as it is redundant.

Background:

Equation (37) was originally used as an intermediate calculation. This calculation was fully incorporated into Equation (40) in the final version of *VMD0055, v1.1*, making Equation (37) redundant.

4 CORRECTION 4

Correction:

Equation (41) has been corrected as follows:

$$\Delta C_{LK-net-LB,t} = \Delta C_{MP,LB-UDef,t} - \Delta C_{BSL,LB-UDef,t} ~~\Delta C_{BSL,LB-UDef,t} - \Delta C_{MP,LB-UDef,t}~~$$

Background:

Equation (41) is used to estimate GHG emissions from leakage due to deforestation activities shifting onto the leakage belt. The equation was initially written following the logic for calculating GHG emission reductions (i.e., calculated as emissions in the baseline scenario (ΔC_{BSL}) minus emissions during project implementation (ΔC_{MP}). However, where leakage occurs in the leakage belt, emissions during project implementation are higher than baseline emissions and, thus, baseline less project emissions would yield a negative value. Equation (41) has been corrected by reversing the order of the terms to prevent obtaining a negative value where leakage occurs.

5 CORRECTION 5

Correction:

Equation (43) has been corrected as follows:

$$GHG_{MP,LK-UDef,E,t} = \sum_{t=1}^{t*}\sum_{i=1}^{M}\Big(\big(AD_{MP,LB-UDef,i,t} - AD_{BSL,LB-UDef,i,t}\big) \times GHG_{LB,E,i,t}\Big) ~~\Big(\big(AD_{BSL,LB-UDef,i,t} - AD_{MP,LB-UDef,i,t}\big) \times GHG_{LB,E,i,t}\Big)~~$$

Background:

Equation (43) is used to estimate other GHG emissions from leakage due to deforestation activities shifting onto the leakage belt. The equation was initially written following the logic for calculating GHG

emission reductions (i.e., calculated as deforestation in the baseline scenario (AD_{BSL}) minus deforestation during project implementation (AD_{MP}). However, where leakage occurs in the leakage belt, deforestation during project implementation is higher than in the baseline and, thus, baseline less project deforestation would yield a negative value. Equation (43) has been corrected by reversing the order of the terms to prevent obtaining a negative value where leakage occurs.

6 CORRECTION 6

Correction:

Metadata tables corresponding to data and parameter values that must be updated at the time of baseline reassessment have been amended to make them consistent with the duration of the jurisdictional and project baseline validity periods, as described in the amended Section 5.3.1.

Background:

Metadata tables (Section 6.2 Data and Parameters Monitored) for data and parameters that must be updated at the time of baseline reassessment initially set the "Frequency of monitoring/recording" to be every six years. This is inconsistent with the amended Section 5.3.1 (see Clarification 1). The entry for "Frequency of monitoring/recording" in tables for parameters $A_{Available}$, $AD_{LB\text{-}UDef}$, $AD_{PA\text{-}UDef}$, $C_{p,i}$, $C_{p,post,i}$, $C_{AB\_nontree,i}$, $C_{AB\_nontree,post,i}$, $C_{AB\_tree,i}$, $C_{AB\_tree,post,i}$, $C_{BB\_nontree,i}$, $C_{BB\_nontree,post,i}$, $C_{BB\_tree,i}$, $C_{BB\_tree,post,i}$, $C_{DW,i}$, $C_{DW,post,i}$, $C_{LI,i}$, $C_{LI,post,i}$, $C_{SOC,i}$, $C_{SOC,post,i}$, $C_{WP,i}$, $C_{WP100,i}$, $\Delta C_{OLB,t}$, $CountJ_{CHC,ss}$, $E_{BSL,BiomassBurn,i,t}$, $E_{Cstocks,LMZ,t}$, $E_{BSL,FC,i,t}$, $N2O_{BSL,direct\text{-}N,i,t}$, and $PROP_{MIG}$ has been amended as follows:

Frequency of monitoring/recording	At project baseline reassessment

7 CORRECTION 7

Correction:

The list of items included in the *AD Baseline Allocation Report* has been amended to include the jurisdictional area potentially available for activity shifting outside the UDef LB, as follows:

> Project allocations will be documented in an *AD Baseline Allocation Report,* which includes the following:
>
> 1) Definition of forest used in FCBM construction;
> 2) Definition of deforestation used in AD estimation;
> 3) Start and end date of the HRP;
> 4) Start and end date of the BVP;

5) Table of total AD allocation for the UDef PA and UDef LB over the BVP;

6) The portions of the jurisdictional FCBM intersecting the UDef PA and UDef LB;

7) The portions of the jurisdictional deforestation risk map intersecting the UDef PA and UDef LB – independently assessed for appropriateness and methodological soundness – including the name of the DSP that developed it, data layers and type of statistical model used, prediction ability statistics, and the relevant digital GIS files;

8) The spatial boundaries of any registered AFOLU carbon projects, associated leakage belts, and projects in the VCS project pipeline;

9) The jurisdictional area potentially available for activity shifting outside the UDef LB; and

10) The jurisdictional emission factor due to land cover transition in areas available for activity shifting outside the UDef LB.

Background:

The original list of items included in the AD Baseline Allocation Report had inadvertently omitted this information.

8 CLARIFICATION 1

Clarification:

The text of Section 5.3.1 and the caption of Figure 1 have been amended as follows:

> The project's BVP under this module is defined by the corresponding jurisdictional BVP. However, wWhere a project validates or transitions to *VM0048* and this module after the initial year of a jurisdictional BVP (e.g., BVP 1 in Figure 1 below), an initial baseline validity period will be applied. There are two options when moving to the jurisdictional BVP:
>
> 1) **Option 1:** The project proponent chooses to be allocated UDef AD from the subsequent jurisdictional BVP (e.g., BVP 2 in Figure 1) when that BVP begins; or
>
> 2) **Option 2:** The initial project BVP is extended into the subsequent jurisdictional BVP for the duration set out in the *VCS Standard* or two years, whichever is shorter. After the initial project BVP ends, the project must adopt an allocation from the respective jurisdictional baseline. Where BVP data is are available for the next BVP, this option can be used only up to the fourth year of the Verra-endorsed jurisdictional BVP.
>
> Subsequent project BVPs must be the same duration as the jurisdictional BVP.

In the example illustrated in Figure 1, ~~the~~ a six-year jurisdictional BVP starts in 2020 and a project registers with a 2024 start date. In Option 1, the project would use the project-specific allocated AD for two years and transition~~s~~ to jurisdictional BVP 2 in 2026 (i.e., when that BVP begins). In ~~, while in~~ Option 2, the project-specific allocated AD would be used for four years and the project would transition~~s~~ to jurisdictional BVP 2 no later than 2028 – two years into the new BVP. The new baseline allocated in 2028~~. If the project selects Option 1, it transitions to jurisdictional BVP 2 in 2026 (i.e., when that BVP begins). If .the project chooses Option 2, it transitions in 2028 – two years into the new BVP. The 2028 baseline~~ is valid until the next jurisdictional BVP transition, in 2032, when the project is allocated AD ~~for~~ from the next jurisdictional baseline (BVP 3).

Figure 1: Potential options for projects' initial baseline validity period, including example dates. Arrows labeled Option 1 and Option 2 represent project baselines; arrows labeled BVP 1 and BVP 2 represent jurisdictional baselines.

Background:

The original text of Section 5.3.1 and the caption of Figure 1 were not sufficiently clear. The text of Section 5.3.1 and the caption of Figure 1 have been amended to make the relationship between the duration of the jurisdictional and project baseline validity periods clearer, and to further clarify the options for projects that validate or transition to *VM0048* after the initial year of the jurisdictional baseline.

9 CLARIFICATION 2

Clarification:

Step 1 in Section 5.3.3.2 has been edited to make the procedure for identifying forest degradation clearer, as follows:

Identification of ~~Estimation of Project Emissions through~~ **Forest Degradation in the UDef PA**

The UDef PA must be monitored for evidence of anthropogenic forest degradation that may have occurred. Degradation monitoring must include two components:

1) ~~1) Full e~~Evaluation of the ~~UDef PA for the~~ presence of new roads (defined here as continuous bare ground at least 2 m wide and 50 m long, with connection to pre-existing road networks or human settlements); and

2) ~~2)~~ Sample-based e~~E~~xamination ~~in stratified samples for~~ to identify sample points ~~sites with~~ showing a decrease in canopy cover of 50 percent or more that do~~es~~ not qualify

as deforestation. The decrease in canopy cover is calculated as the difference in canopy cover ~~at~~between the start and end of the monitored period.

Where such areas are recorded, new degradation impact areas must be determined and delineated:

- Identified new roads must be delineated in a supplementary vector data file (e.g., GeoPackage, ~~S~~shapefile, or KML) of the UDef PA. The digital file of new roads must be submitted to Verra as part of the ~~monitoring report~~verification request. Such new roads ~~must~~ will be excluded from the subsequent risk mapping process.
- For new roads, degradation impact areas must be determined and delineated as a ~~in all instances equal to an expanse of~~ 500 ~~-~~ m wide buffer on either side of the new roads.
- For sampling points showing a ~~recorded~~ decrease~~s~~ in canopy cover of 50 percent or more that does not qualify as deforestation, the area immediately surrounding the sampling point must be examined in imagery with a resolution of 10 m or finer. Where the area over which canopy cover has decreased is equal to or greater than 1 ha, this area must be delineated as a degradation impact area. ~~A decrease in canopy cover is calculated as the difference between canopy cover at the start and end of the monitored period.~~

These ~~delineated~~ degradation impact areas must be withdrawn from REDD reporting for the monitored period, which involves temporarily treating forest carbon stocks as zero. The areas must be treated as new strata and reincorporated once field measurements ha~~ve~~s ~~been~~ conducted ~~occurred with~~ and new (decreased) ~~emission factors~~carbon stocks have been estimated. ~~for recording project emissions and future avoided unplanned deforestation emissions.~~ When these areas are reincorporated in a subsequent monitoring period, both baseline and monitored emissions must be recalculated beginning from the first year in which the new forest stratum was defined, taking into account the revised emission factor and the UDef AD originally allocated to the stratum in the ~~associated~~ corresponding BVP.

Background:

The section “Identification of Forest Degradation in the UDef PA” (originally titled “Estimation of Project Emissions through Forest Degradation in the UDef PA”) of Step 1 of Section 5.3.3.2 provides guidance for identifying and quantifying forest degradation in the UDef PA during project implementation. This text has been edited to make clear the aim of identifying and quantifying forest degradation in the UDef PA and to provide more detailed guidance on how to identify and handle such instances.

10 CLARIFICATION 3

Clarification:

A clarification on how to deal with negative values potentially resulting from the amended Equation (41) has been inserted in Section 5.3.4.3 as follows:

> ~~"...Note that $\Delta C_{LK\text{-}net\text{-}LB,t}$~~Equation (41) yields a negative value where GHG emissions in the UDef LB during the monitoring period are lower than projected in the baseline. In such a case, $\Delta C_{LK\text{-}net\text{-}LB,t}$ must be set to zero~~ may be less than zero at this step, where forest carbon stocks in the monitoring period are greater than projected under the baseline. Negative values are accounted for in a later step~~ such that positive leakage is never attributed to the project.

Background:

The amended Equation (41) yields a negative value where GHG emissions in the leakage belt during project implementation are lower than in the baseline, leading to positive leakage. This possibility is eliminated by setting the result of Equation (41) to zero whenever it yields a negative value.

11 CLARIFICATION 4

Clarification:

A clarification on how to deal with negative values potentially resulting from the amended Equation (43) has been added to Section 5.3.4.3 as follows:

> Equation (43) yields a negative value where deforestation in the UDef LB during the monitoring period is lower than projected in the baseline. In such a case, $GHG_{MP,LK\text{-}UDef,E,t}$ must be set to zero such that positive leakage is never attributed to the project.

Background:

The amended Equation (43) yields a negative value where deforestation in the leakage belt during project implementation is lower than in the baseline, leading to positive leakage. This possibility is eliminated by setting the result of Equation (43) to zero whenever it yields a negative value.

12 CLARIFICATION 5

Clarification:

The now unnecessary provision included in Section 5.3.4.5 for dealing with potential negative values for total leakage has been removed as follows:

Total activity-shifting leakage emissions are the sum of leakage from within and outside the UDef LB. ~~Where total leakage is calculated to be less than zero, $\Delta C_{LK\text{-}AS,t}$ is assigned a value of zero.~~

Background:

Section 5.3.4.5 included a provision for dealing with potential negative values of total leakage. Clarifications 2 and 3 above make this provision no longer necessary.

13 CLARIFICATION 6

Clarification:

Section 5.3.5 has been edited to clarify that the total volume of GHG emissions due to leakage cannot exceed the volume of emissions avoided by the project.

Background:

Equation (50) yields a negative value where the calculated GHG emissions from leakage exceed the volume of GHG emissions avoided by the project. To address this, the following clarification has been added:

The total GHG emissions due to leakage would, at most, equal the amount of GHG emissions from unplanned deforestation avoided by the project. For any given year~~,~~ t~~,~~ in which $\Delta C_{BSL,PA\text{-}UDef,t}$ ~~–~~ $\Delta C_{MP,PA\text{-}UDef,t,} > 0$:

~~-~~if $\Delta C_{LK\text{-}UDef,t}$ ~~exceeds~~> $\Delta C_{BSL,PA\text{-}UDef,t}$ ~~–~~ $\Delta C_{MP,PA\text{-}UDef,t}$, then $NER_{UDef,t}$ is assigned a value of zero.