

SUMMARY OF PUBLIC CONSULTATION

VM0042 Methodology for Improved Agricultural Management, v2.1

A draft of *VM0042 Methodology for Improved Agricultural Management, v2.1*, was open for public consultation between April 5, 2024 and May 6, 2024. This document includes a list of each comment received and Verra's response.

Section 3 - Definitions

Section 3 - Definitions			
#	Organization	Comment	Verra's Response
1	Carbonext	The difference between "project boundary" and "project area" is unclear. It is recommended to include a description of the term "project boundary" in the "Definitions" section.	Please refer to the VCS Program Definitions, v4.5 for the definition of 'project boundary.'

Section 6 – Baseline Scenario

Section 6 – Baseline Scenario			
#	Organization	Comment	Verra's Response
2	Yard Stick PBC	The inclusion of baseline control sites is an exciting change to VM0042 as it adds potential for direct observation of SOC stock changes rather than theoretical model predictions. However, we feel that selecting baseline sites which share all criteria listed in Table 7 with each stratum could make Quantification Approach 2 logistically infeasible. Furthermore, some criteria listed in Table 7 might be less	The introduction of baseline control sites as central element for Quantification Approach 2: measure and remeasure for SOC was implemented in v2.0. Verra incorporated vast public feedback from the public consultation of the draft v2.0. Yard Stick is welcome to propose any further edits to Section 8.2 to further clarify procedures of setting up baseline control sites.

Section 6 – Baseline Scenario

#	Organization	Comment	Verra's Response
		influential in SOC stock change over time (i.e. historical land cover, native vegetation, soil group) and/or may change throughout the course of the project (i.e. historical ALM practices). We suggest including more detail regarding when and where specific factors must be matched and/or how projects might provide justification to minimize logistical challenges of selecting sufficient control fields.	

Section 7 - Additionality

Section 7 - Additionality

#	Organization	Comment	Verra's Response
3	Carbonext	The phrase "Where the project is implementing only one activity, the adoption rate of that practice must be lower than 20 percent in each region within the project spatial boundary" is not clear. We suggest that this sentence be rephrased for better understanding, as it implies that the project activity cannot occupy more than 20% of the project area. This refers to the need to better define the concept of 'project spatial boundary' in the 'Definitions' section.	Verra replaced the term 'project spatial boundary' with 'project area.' Verra welcomes any further suggestions to enhance clarity via the pre-consultation for v3.

Section 8.1 - Summary

Section 8.1 - Summary			
#	Organization	Comment	Verra's Response
4	The Nature Conservancy (TNC)	Pages 23 and 34 reference a requirement that the division of the project area "into multiple quantification units must be demonstrated to be more homogenous than the project area in its entirety". This implies but does not specify a quantitative demonstration of which there could be several done that meet this vague criteria. We recommend that Verra specify exactly how this demonstration needs to be done to eliminate any potential confusion for project proponents or VVBs.	This specification is planned for v3. Verra welcomes further feedback through the pre-consultation of the v3 development process.

Section 8.2 – Baseline Emissions

Section 8.2 – Baseline Emissions			
#	Organization	Comment	Verra's Response
5	The Nature Conservancy (TNC)	Pages 26, 55, and 56 have incomplete references ("Error! Reference source not found"). TNC recommends that these errors be resolved.	These cross-references have been corrected.
6	Carbonext	The result obtained from equation 5 is likely to be ten times smaller with the update of the methodology (factor of 0.1 changed to 0.01). It is suggested to investigate this item. In case of changes in the calculated values, please inform what measures Verra will take regarding projects validated with the old equation.	This correction was only for the appropriate conversion of the units g/cm ² to t/ha. We do not expect ERR calculations to be affected by this. If you have a concern regarding a validated project, please contact secretariat@verra.org providing your project ID.
7	Yard Stick PBC	Emphasis on SOC stock: As the protocol is written, there is strong emphasis on measuring bulk density and SOC	Verra welcomes this suggestion. However, Verra considers allowing the joint quantification of SOC stocks via VisNIR

Section 8.2 – Baseline Emissions

#	Organization	Comment	Verra's Response
		concentration separately to predict SOC stocks. While bulk density is imperative for accurate calculation of SOC stock changes under conventional soil sampling and lab analysis methods, research shows that SOC stocks can be calculated with 88% accuracy using VisNIR spectroscopy methods without independently predicting SOC concentration and bulk density (Gyawali et al., in review). This direct stock modeling approach performed better than independent bulk density and SOC concentration estimation. The protocol should emphasize quantifying the uncertainty of SOC stocks as the goal rather than estimating bulk density and SOC concentration separately. This would appropriately permit cost-effective technologies which do not directly measure bulk density, while still requiring accurate measures of the parameter of interest (SOC stock) and quantification of associated uncertainty. We therefore call for the following changes: "Samples for which estimate SOC stock (bulk density, dry soil mass and SOC content) should be taken at the same time and from sampling locations within a few meters of the previous sampling point location, avoiding edge effects and disturbed areas." (Section 8.2.1.5) "Individual estimates of SOC content stock at each soil sampling point are sampled from a PPD ..." (Section 8.6.2.1)	without separately accounting for SOC content and bulk density, a major change to the methodology that requires public consultation. Verra therefore invites Yard Stick to include their suggested edits as part of the draft v3, which will be subject to public consultation in early Q3 2024.

Section 8.5 - Net GHG Emission Reductions and Removals

Section 8.5 - Net GHG Emission Reductions and Removals			
#	Organization	Comment	Verra's Response
8	Shell	Add (or equal to) in following sentence - (i.e., the project carbon stock at the end of the monitoring period is less than (or equal to) the carbon stock at the project start date).	The modification was made in section 8.5
9	Shell	The overall section is divided between 'GHG emission reductions' and 'GHG removals'. There can be situations where both occur (with a declining baseline and a positive with-project scenario). The formulas allow for this - anything below the T0 is an emission reduction and anything above the T0 is a removal. However, it is not explained very clearly in the text. This situation is described in the GHG Removal section - 'Carbon stocks decrease from year t to year t + 1 in the baseline scenario and carbon stocks increase from year t to year t + 1 in the project scenario', when this is not just a GHG Removal. The text also says 'removals occur when the cumulative carbon stock change in the project scenario is positive' - this is misleading as this scenario would have a positive carbon stock change, but it leads to a combination of emission reductions and removals, not just removals. We would suggest there is a distinct section to explain a scenario where there is a combination of GHG emission reductions and removals deserves, for clarity. We feel the three scenarios (1 - GHG Emission Reduction, 2 - GHG Removal, 3 - Combination of both) could be explained with graphs/diagrams to show the distinction.	Verra thanks you for your comment and agrees that the case where both reductions and removals occur could be further clarified. Clarification was added in paragraph (2) of the introduction to equation 37.
10	Shell	It's possible to achieve the same change in soil carbon stock from different activities (e.g., no-till vs cover crops) but through completely different mechanisms. For example, a baseline that reduces SOC from 50 tC/ha to 40 tC/ha over the first 10 years due to intensive monoculture cropping with conventional tillage, may adopt both no-till and cover crops and after 10 years the SOC stock is 49 tC/ha. Compared to	Verra defines carbon dioxide removal as “a long-term atmospheric benefit attributable to a project activity that increases durably-stored carbon stocks in geological, terrestrial, ocean, or product carbon pools, net of associated project and leakage emission” (i.e., the project carbon stock is higher than at the project

Section 8.5 - Net GHG Emission Reductions and Removals

#	Organization	Comment	Verra's Response
		t0 we have a net loss in SOC but compared to the baseline there is 9 tC/ha difference. The impact of reduced disturbance through no-till may lead to reduced emissions (i.e. reductions) of say 4 tC/ha and the adoption of cover crops may increase annual C inputs (through photosynthesis) leading to new soil organic matter (i.e. removals) of say 5 tC/ha. In this example, the project delivers 4 tC/ha or reductions and 5 tC/ha of removals, but under the current VM42 revision description it would appear to all be reductions. If applying a measure-and-model approach, it would be possible to apportion out the impacts of GHG emission reduction activities and GHG removal activities. Has Verra considered this?	start date). The case you described does not increase carbon stocks, therefore, it does not meet the conditions to qualify as carbon dioxide removals.
11	Indigo Ag	We suggest pointing out that the assumption is being made that the increase of carbon stocks over time corresponds to removals of CO2 from the atmosphere. That may not always be the case; for example, erosion that blows carbon-rich soil into the project boundary, or vertical movement of carbon in the soil, leads to carbon accrual but not carbon sequestration. We elaborate a bit on this point in the attached PDF.	Models that are used to estimate GHG flux based on soil characteristics do not account for "erosion that blows carbon-rich soil into the project boundary, or vertical movement of carbon in the soil". Therefore, your remark is mostly relevant for the Quantification Approach 2: <i>measure and remeasure</i>. Verra reviewed Don, et al. (2023) (cited as Seidel et al. (2023), and consider the VCS definition of reductions is aligned with the Don, et al. (2023) definition of SOC loss mitigation. The VCS definition of removals is aligned with the Don, et al. (2023) definition of negative emissions. Verra remains open to discuss further options with Indigo Ag to account for eroded sediment addition from outside of the project area, as well as decreases in SOC stocks in the project area through erosion. For the time being, Verra has added a footnote to Section 5 Project Boundary to clarify that "the methodology does not separately account for SOC stock changes resulting from erosion."

Section 8.5 - Net GHG Emission Reductions and Removals

#	Organization	Comment	Verra's Response
12	Indigo Ag	The proposed revision aggregates across space the SOC changes over time, and then it computes removals and avoided SOC losses from the project-wide totals. That order of operations will frequently result in avoided SOC losses in a portion of a project getting mislabeled as removals, causing buyers to be misled that they're buying pure removals. Conversely, it may result in removals in a portion of the project getting mislabeled as avoided SOC losses. We expand on this point in our attached PDF.	Verra thanks you for sharing alternative thinking on the accounting of removals and reductions and acknowledges that the proposed method is innovative and spatially precise. However, Verra has decided not to incorporate the proposed change for the following reasons: 1. The <i>VCS Standard</i> bases GHG emissions flux accounting on the definition of project area and project boundaries. GHG emissions fluxes must be accounted for across the whole project area and not for a portion only of the project area. The VCS standard does allow for the breakdown of the project area into sub-project areas. VM0042 requires breaking down the project area into quantification units and strata. 2. The current approach of the VCS to removals excludes the possibility of removals occurring when the project carbon stocks are below the carbon stock at year 0 (t0): "Carbon dioxide removals occur when the cumulative carbon stock change in the project scenario is positive (i.e., the project carbon stock is higher than at the project start date)." This means a project cannot account for removals until the whole project carbon stock is superior to or equal to carbon stock at project start date, in alignment with the approach to C sequestration from Don, et al. (2023) Verra remains open to continue discussions with Indigo Ag and potentially identify further adjustments to the accounting of reductions and removals as part of the major revision to VM0042, toward v3.
13	Indigo Ag	To address the issue raised in the previous row, we propose that removals and avoided SOC losses be computed at the most granular level possible (the sample unit) and then those two outcome variables are aggregated across the project, using the methods already written in VM0042. That avoids the issue raised above. More details are shared in our attached PDF.	
14	Indigo Ag		
15	Catona Climate	Clarify either in this section or elsewhere more specifically how removals and reductions are to be distinguished. The	Please refer to the VCS Program Definitions v4.5 , which includes the definitions of GHG Emission Reductions and

Section 8.5 - Net GHG Emission Reductions and Removals

#	Organization	Comment	Verra's Response
		proposed updated methodology contains many small changes throughout which we assume, based on the notice for feedback, make this distinction possible. However, the ability to differentiate removals vs. reductions is not specifically addressed in the methodology text nor are specific instructions given for developers wishing to distinguish	Carbon dioxide removals. The aggregate distinction between reductions and removals is shown in section 8.7.
16	The Nature Conservancy (TNC)	The proposed changes to Equations 44 and 45 on pages 67 and 68 create a perverse incentive with the new application of the uncertainty deduction at the scenario-level to $\Delta\text{CO2}_{\text{soilbsl},t}$ and $\Delta\text{CO2}_{\text{soilwp},t}$ as opposed to the source/pool-level. For the baseline scenario, the uncertainty deduction will conservatively reduce credits when $\Delta\text{CO2}_{\text{soilbsl},t} < 0$ but will non-conservatively increase credits when $\Delta\text{CO2}_{\text{soilbsl},t} > 0$. - Example: $\Delta\text{CO2}_{\text{soilbsl},t} = -5$, $\text{UNCt,CO2} = 0.25$, $\Delta\text{CO2bsl},t = -3.75$ (conservative) - Example: $\Delta\text{CO2}_{\text{soilbsl},t} = 5$, $\text{UNCt,CO2} = 0.25$, $\Delta\text{CO2bsl},t = 3.75$ (not conservative) The issue is swapped for the project scenario: the uncertainty deduction will conservatively reduce credits when > 0 but will non-conservatively increase credits when < 0. We recommend that Verra remove the perverse incentive by working with a technical expert to modify the formulas to ensure that the application of the uncertainty deduction	Verra has run simulation calculations to apply the uncertainty deduction following the procedures in v2.0 and v2.1 achieving the same results for the total ERRs regardless of the step in which the uncertainty deduction is applied. Therefore, no penalty on the project is generated by the revision of these equations. Verra remains open to any further improvements to these deductions for implementation in v3.

Section 8.5 - Net GHG Emission Reductions and Removals

#	Organization	Comment	Verra's Response
		always serves to increase the estimate of carbon stock change under the baseline scenario and decrease the estimate of carbon stock change under the project scenario.	

Section 8.6 - Uncertainty

Section 8.6 - Uncertainty

#	Organization	Comment	Verra's Response
17	The Nature Conservancy (TNC)	The proposed application of the uncertainty deduction at the scenario-level as opposed to the source/pool-level (Equations 44 and 45) is not matched by a change in how uncertainty, specifically model prediction error, is quantified in Section 8.6.1.1.1. In the proposed revision, model prediction error is still calculated as both the error in predictions of the baseline and project scenarios (Equations 60, 61, 63, and 64). This effectively results in a double penalty where a project's net carbon changes in the baseline scenario are needlessly penalized for uncertainty in a model's ability to predict the project scenario and changes in the project scenario are needlessly penalized for uncertainty in the baseline scenario. We strongly recommend that the uncertainty	Equations 60 to 64 were not modified, therefore the quantification of uncertainty UNCT,CO2 was not affected. Then, as developed in the response above, v2.0 and v2.1 achieve the same results for the total ERRs regardless of the step in which the uncertainty deduction is applied. Therefore, no penalty on the project is generated by the revision of these equations. Verra remains open to any further improvements to these deductions for implementation in v3.

Section 8.6 - Uncertainty

#	Organization	Comment	Verra's Response
		section be further revised in partnership with a qualified technical expert to eliminate this double penalty and ensure that the quantification of uncertainty and application of uncertainty deductions appropriately reflect the new separation of reduction and removal accounting.	
18	Yard Stick PBC	Regional calibration libraries: Calibrating spectroscopy and other alternative methods of SOC estimation in conditions relevant to the project is essential for quantifying uncertainty relevant to the project. However, we feel that the guidance surrounding calibration datasets is too prescriptive and may not apply to all emerging technologies. Specifically, the protocol says that data from outside of the project domain should not be included for spectroscopy calibration, but there may be features of a spectra which are more predictive than the location from which they were taken. In this case we might achieve increased accuracy when including calibration spectra which were not taken from within the project. Padarian et al. (2019) and Viscarra Rossel (2016) show that global and regional datasets provide a diverse set of spectra which in turn identify local relationships in the data to produce accurate predictions of soil properties at local scales. Instead of prescriptive calibration dataset requirements, it would be more effective to focus on performance metrics for emerging technologies. The following suggested changes to the text allow	Verra thanks YardStick for these suggestions and will contact separately to include their suggested edits as part of the draft v3, which will be subject to public consultation in early Q3 2024.

Section 8.6 - Uncertainty

#	Organization	Comment	Verra's Response
		calibration data outside of the project domain, provided that they improve prediction accuracy above that which is achieved through project specific calibration. Furthermore, we feel that the suggested 10-15% of sampling points to include in the calibration/validation dataset is arbitrary and would be better expressed as "a statistically appropriate subset of data points", since 10-15% may not be appropriate depending on project scale. These changes include: "...a soil spectroscopy model calibrated and validated with an independent dataset appropriate to the project area. This dataset must either be an independent dataset which matches the project domain or can be compiled Alternatively, the project proponent may estimate the error of the spectroscopy model by selecting 10–15 percent of samples in a project a statistically appropriate subset of sampling locations, analyzing these samples using dry combustion methods, and comparing those results to the spectroscopy model predictions." (Section 8.6.2.1)	
19	Yard Stick	Prediction Intervals: As written, the protocol limits uncertainty calculation for alternative approaches for measuring SOC content to Monte Carlo analysis. This excludes other methods which have been proven to effectively measure uncertainty but do not generate PDFs. For example, conformal prediction is a statistically rigorous method that generates prediction intervals rather	Verra thanks YardStick for these suggestions and will contact separately to include their suggested edits as part of the draft v3, which will be subject to public consultation in early Q3 2024.

Section 8.6 - Uncertainty

#	Organization	Comment	Verra's Response
		than PDFs, which are then sampled from L times to generate point estimates (Angelopoulos & Bates, 2022). We therefore suggest including the option to sample from prediction intervals as well as PDFs in the following sections: "In this case, MC simulation uncertainty analysis which generates PPD or prediction intervals (i.e. MC simulation) is required unless it is demonstrated that such errors have a de minimis effect on model estimates of ERRs." (Section 8.6.1) "The value of SOC at each point is iteratively resampled L times from a PPD or prediction interval derived from a soil spectroscopy model..." (Section 8.6.2.1) "For example, MC simulations would entail sampling from a PPD or prediction interval of estimated SOC content for a given point based on a chosen soil spectroscopy method (see Appendix 4 for additional details), and those values would be used to initialize the process-based model." (Section 8.6.1.2.2) "Individual estimates of SOC content at each soil sampling point are sampled from a PPD or prediction interval L times and compared to the mean estimate of SOC across all L simulations to generate uncertainty estimates." (Section 8.6.2.1)	

Section 8.7 - Calculation of Verified Carbon Units

Section 8.7 - Calculation of Verified Carbon Units			
#	Organization	Comment	Verra's Response
20	Indigo Ag	There is a missing right parenthesis in the second line of Equation (76), right after the " $- I(\Delta CO_2wp)$ ".	The modification was made in equation 76 (now 75)
21	The Nature Conservancy (TNC)	We recommend that Verra swap the order of Equations 75 and 76 to match Equations 44 and 45 that consider reductions and then removals.	The modification was made.

Appendix 4 – Guidance on Potential Emerging Technologies to Measure SOC Content

Appendix 4 – Guidance on Potential Emerging Technologies to Measure SOC Content			
#	Organization	Comment	Verra's Response
22	Yard Stick PBC	Emphasis on SOC stock: As the protocol is written, there is strong emphasis on measuring bulk density and SOC concentration separately to predict SOC stocks. While bulk density is imperative for accurate calculation of SOC stock changes under conventional soil sampling and lab analysis methods, research shows that SOC stocks can be calculated with 88% accuracy using VisNIR spectroscopy methods without independently predicting SOC concentration and bulk density (Gyawali et al., in review). This direct stock modeling approach performed better than independent bulk density and SOC concentration estimation.	Verra welcomes this suggestion. However, allowing the joint quantification of SOC stocks via VisNIR without separately accounting for SOC content and bulk density would be a major change to the methodology that requires public consultation. Verra therefore will consider Yard Stick's suggested edits as part of the draft v3, which will be posted for public consultation in early Q3 2024.

Appendix 4 – Guidance on Potential Emerging Technologies to Measure SOC Content

#	Organization	Comment	Verra's Response
		The protocol should emphasize quantifying the uncertainty of SOC stocks as the goal rather than estimating bulk density and SOC concentration separately. This would appropriately permit cost-effective technologies which do not directly measure bulk density, while still requiring accurate measures of the parameter of interest (SOC stock) and quantification of associated uncertainty. We therefore call for the following changes: “project proponents may use emerging technologies to determine SOC content stock...” "Project proponents must provide evidence of the ability of an emerging technology to predict SOC content with sufficient accuracy stocks with quantified uncertainty through the development and application of adequate calibration with data obtained from classical laboratory methods, such as dry combustion.”	
23	Yard Stick PBC	Regional calibration libraries: Calibrating spectroscopy and other alternative methods of SOC estimation in conditions relevant to the project is essential for quantifying uncertainty relevant to the project. However, we feel that the guidance surrounding calibration datasets is too prescriptive and may not apply to all emerging technologies. Specifically, the protocol says that data from outside of the project domain should not be	Verra thanks YardStick for these suggestions and will contact separately to include their suggested edits as part of the draft v3, which will be subject to public consultation in early Q3 2024.

Appendix 4 – Guidance on Potential Emerging Technologies to Measure SOC Content

#	Organization	Comment	Verra's Response
		included for spectroscopy calibration, but there may be features of a spectra which are more predictive than the location from which they were taken. In this case we might achieve increased accuracy when including calibration spectra which were not taken from within the project. Padarian, et al. (2019) and Viscarra Rossel (2016) show that global and regional datasets provide a diverse set of spectra which in turn identify local relationships in the data to produce accurate predictions of soil properties at local scales. Instead of prescriptive calibration dataset requirements, it would be more effective to focus on performance metrics for emerging technologies. The following suggested changes to the text allow calibration data outside of the project domain, provided that they improve prediction accuracy above that which is achieved through project specific calibration. Furthermore, we feel that the suggested 10-15% of sampling points to include in the calibration/validation dataset is arbitrary and would be better expressed as “a statistically appropriate subset of data points”, since 10-15% may not be appropriate depending on project scale. These changes include: “ The site characteristics for the underlying calibration data must either match the project site conditions, including range of SOC stocks, soil types and land use, or match the project site in ways which are shown to provide increased accuracy over a model constructed on a dataset which matches the	

Appendix 4 – Guidance on Potential Emerging Technologies to Measure SOC Content

#	Organization	Comment	Verra's Response
		aforementioned conditions."	
24	Yard Stick	“For MIR and NIR, soil samples should be air or oven-dried and crushed or sieved to a size fraction smaller than 2 mm.” (Table 9). We suggest removing prescription surrounding preparation of MIR and NIR samples, since the most cost-effective technologies sample in-situ and should not be subject to crushing/sieving or drying. This could be achieved by either omitting this sentence or adding a separate row in Table 9 for in-situ NIR technologies.	Verra thanks YardStick for these suggestions and will contact separately to include their suggested edits as part of the draft v3, which will be subject to public consultation in early Q3 2024.

General Feedback

General feedback

#	Organization	Comment	Developer's Response
25	Indigo	The new term "quantification unit" is confusing and language about it contradicts with language about strata. Specifically, the document says you should only stratify at the sample unit level, and elsewhere it says you should stratify at the quantification unit level. We expand on our confusion in the attached PDF.	This change was introduced to avoid confusion from project proponents interpreting that sample units only relate to soil sampling. Verra received this feedback through diverse stakeholder enquiries. The confusion you raise regarding unit definition such as hectares or acres is eliminated in VM0042 because the size unit is standardized to hectares. Verra and Terra Carbon are working to further clarify the definition of quantification units and strata as part of project development, avoiding ambiguity, as part of the

General feedback			
#	Organization	Comment	Developer's Response
			revision of the methodology in v3.
26	Catona Climate	General support for methodology changes that allow for differentiation between VCUs from removals vs. reductions. Removals vs. avoidance has been an important factor among carbon credit buyers. It will greatly enhance the marketability of agricultural carbon projects using the VM0042 methodology if projects have the ability to quantify removals and reductions specifically.	No response needed, supportive comment.
27	The Nature Conservancy (TNC)	TNC thanks Verra for the opportunity to comment on the proposed revisions for VM0042. As both a project proponent and partner, TNC views VM0042 as one of the best, most scientifically rigorous methodologies for projects on agricultural lands available in the voluntary carbon market today. TNC commends Verra's commitment to the continual improvement of the methodology as demonstrated by recent revisions, errata, and clarifications. As both a proponent and partner for projects using VM0042, TNC has a vested interest in the methodology's quality and usability, as well as its consistency with accounting approaches used in other methodologies. Our comments therefore reflect our recent comments on the similar revision to separate reduction and removal accounting in VM0045. TNC is uncertain that the labeling equations included in this revision reflect the best option available as there is no scientific consensus on how best to differentiate reductions and removals. TNC therefore prefers an approach that is conservative and cautious in applying these new ideas that could have broad implications for the voluntary carbon market. The process to revise VM0042, while well intentioned, was rushed and done internally without input from key technical experts. This has resulted in new	Verra thanks you for your comment and your support in the assessment of the best approach to quantify removals and reductions. Please consider that labeling of reductions and removals is optional in the VCS program, and the separation of removals and reductions for VM0042 follows the procedures and requirements of the <i>VCS Methodology Requirements, v4.4</i>. Verra is aware that there are other potential quantification approaches for carbon dioxide removals. The proposed quantification approach reflects the VCS Program rules and requirements and is consistent with other VCS methodologies. Verra is always open to continuing to improve the definitions and approaches in the VCS as scientific knowledge and consensus emerges, but we feel it is worthwhile to use the best available approaches now to increase transparency and meet the market demand.

General feedback			
#	Organization	Comment	Developer's Response
		equations with perverse incentives regarding the application of uncertainty (see comments below) and reflects a larger need to move more slowly and thoroughly. Longer term, we continue to invite a deeper collaboration with Verra on the science of labeling VCUs and ways to ensure consistency and conservatism across methodologies and AFOLU pathways.	
28	The Nature Conservancy (TNC)	We propose that the next published version of the methodology reimplement the Table of Contents on the left side of the computer screen where users can click and collapse section headers for the methodology instead of the just seeing thumbnails for each page. The clickable section headers in v1 of VM0042 were a wonderful and easy way to navigate through the methodology while the page thumbnails are much clunkier.	Verra has implemented this change to the pdf file of the methodology.
29	Carbonext	Please specify the grace period rules for adopting this new version of the methodology. For example, will the methodology be required immediately upon its release, or can projects in the validation phase use the old version of the methodology?	Please refer to Section 3.22 Methodology Grace Periods of the <u>VCS Standard, v4.7</u> .
30	Carbonext	In the "Document History" section, version 2.1 appears to be indicated with the wrong date (March 4, 2023).	The document history section was updated with the final date of release of the revised methodology.