

RULE UPDATE

Accounting of Soil Organic Carbon Loss Risk in Activities Applying Methodology “Methane Emission Reduction by Adjusted Water Management Practice in Rice Cultivation”

PUBLICATION DATE: 07/07/2025

VERSION: 1.0

SUMMARY

This Rule Update addresses the potential for Soil Organic Carbon (SOC) loss in rice cultivation when shifting from continuously flooded practices to adjusted water management. It establishes requirements to account for this risk, ensuring a conservative approach to emission reduction estimations.

Applicable to all activities using the "Methane Emission Reduction by Adjusted Water Management Practice in Rice Cultivation" methodology. This Update must be applied alongside existing requirements.

Effective immediately upon publication, these changes are available to be introduced in the project design and monitoring plan. Design certified projects shall update the monitoring plan to ensure full compliance with the requirement for monitoring periods from 01 January 2026. Voluntarily update of the requirements can be done at an earlier date as well. For any labelling, e.g. CCP labelling, the activity will be subject to full compliance from an earlier date, i.e., the date from which CCP labelling is requested, or 01 January 2026, whichever is earlier. No retroactive adjustments apply to monitoring periods concluded before 01 January 2026 or the date of voluntary update, whichever is early. This Rule Update will be included in the methodology text at the time of the next methodology revision.

1| SCOPE, APPLICABILITY AND ENTRY INTO FORCE

1.1 | Scope

- 1.1.1 | This Rule Update addresses the potential Soil Organic Carbon (SOC) loss when rice cultivation shifts from continuously flooded methods to adjusted water management practices. This Rule Update establishes requirements to account for this risk, i.e., SOC losses, ensuring a conservative approach.
- 1.1.2 | The Rule Update is effective immediately upon publication. All activity documents must introduce these changes in the activity design and monitoring plan from 01 January 2026. Activities under design or performance certification are allowed to voluntarily reflect this Rule Update before concluding the certification process, before 01 January 2026. In case of design-certified activities, revised documents may be submitted for all activities at the time of the next performance review, which reflects the Rule Update, and is applicable for monitoring periods starting on or after 01 January 2026.
- 1.1.3 | Performance certification submissions made for monitoring periods starting on or after 01 January 2026 will require consideration of SOC management. Activities may voluntarily adopt this Rule Update, should the performance review be underway.
- 1.1.4 | No retroactive adjustments will be applied to activities. This Rule Update will be reviewed during the next methodology revision and included in the methodology text.

1.2 | Applicability

- 1.2.1 | This Rule Update applies to all activities- standalone activity, Programme of Activity (PoA), real or regular case VPAs including VPAs/CPAs regardless of their current certification status i.e., listed, certified design, certified project that apply:
 - a. GS4GG methodology: Methane Emission Reduction by adjusted Water management practice in rice cultivation,
 - b. Any other Gold Standard approved methodologies on shifting to adjusted water management systems in rice cultivation,
 - c. GS4GG certification of issuance of GSVERs or labelling of issued credits (i.e., CDM).

1.3 | Entry into force

- 1.3.1 | The Rule Update comes into effect upon publication.

2| REQUIREMENTS UPDATES

2.1 | Background

- 2.1.1 | The impact of adjusted water management in rice cultivation (such as AWD) on SOC levels is not yet consistently established.

- 2.1.2 | While some studies mention potential SOC losses, quantitative data from large field studies often do not show these losses to be statistically significant. When losses do occur, they are typically context-dependent, and may be linked to adverse conditions (e.g., severe drying, low-C inputs etc.).
- 2.1.3 | Conversely, significant SOC gains have been reported under AWD, when combined with soil amendments or integrated management practices.
- 2.1.4 | Following a conservative approach, the Gold Standard methodology doesn't allow for consideration of SOC gains. Losses may be deemed insignificant owing to existing safeguards in place that are in place in the [Methane Emission Reduction by Adjusted Water Management Practice in Rice Cultivation](#), [Land-use & Forests Activity Requirements](#) and [Safeguarding Principles & Requirements](#). However, to ensure utmost conservativeness and prevent any potential over-estimation of emission reductions, particularly given the variable nature of SOC dynamics and to reinforce the robustness of the methodology, a methodology mandate is still required to explicitly address and account for any potential SOC losses.

2.2 | Requirements

- 2.2.1 | Despite existing safeguards in the methodology, a methodology mandate is introduced via this Rule Update to ensure any potential losses in SOC are accounted.

2.3 | Management Practices to Conserve and/or Increase SOC

- 2.3.1 | Each Gold Standard activity shall ensure that scientifically established management practices are applied as appropriate for its agro-ecological zone to conserve and potentially improve the SOC in rice fields.
- 2.3.2 | Management practices that conserve and/or improve SOC in rice fields may include, but are not limited to:
- i. Management of crop residue (incorporation of rice straw and stubble back into the fields).
 - ii. Optimised Alternate Wetting and Drying (AWD) water management to ensure there is no overexposure or excess drying of the fields. This includes setting a safe threshold for re-flooding based on water table levels by ensuring water depth does not fall below 5–15 cm depending on agro-ecological conditions; and adjusting the duration of dry periods according to the crop growth stages.
 - iii. Use of green manures, organic amendments (including biochar) and cover crops.
 - iv. Implementing integrated nutrient management.
- 2.3.3 | The project developer shall monitor and report the implemented management practices and yield from the fields during each monitoring period. Management practice and yield shall be reported using the tables provided in Appendix A of this Rule Update.

2.4 | Default Adjustment

2.4.1 | If the management practices are not implemented, or if VVB finds them insufficient to conserve and / or improve SOC in rice fields during performance certification, the project developer shall apply a discount factor to account for any potential SOC losses.

2.4.2 | The discount factor to be applied is 5% of the total emission reductions generated during the monitoring period.

APPENDIX A

Data and Parameters Monitored

Parameter ID	AWD.25
Data/Parameter:	Management practices to conserve and/or improve SOC
Data unit:	--
Description:	<p>Scientifically established management practices for conserving and/or improving SOC in rice fields shall be monitored and reported. These may include various interventions, such as, but not limited to:</p> <ul style="list-style-type: none"> i. Management of crop residue (e.g., incorporating rice straw and stubble). ii. Optimized Alternate Wetting and Drying (AWD) to avoid over-exposure or excessive drying. iii. Use of green manures, organic amendments (including biochar), and cover crops. iv. Integrated nutrient management.
Source of data:	Monitoring Survey, farm logbooks, and a compiled report on management practices across the project's rice fields.
Monitoring frequency:	At every cropping cycle, and at least once every year
QA/QC procedures:	<p>Management practices should be scientifically proven practices which conserve and improve SOC in rice fields, and shall be applicable to the agro-ecological zone or the agricultural regime in place. The developer shall</p> <ul style="list-style-type: none"> • Establish the appropriateness of the chosen management practices through credible scientific references. • Demonstrate farmers' training(s) to ensure implementation of the prescribed management practices
Any comment:	Scientific monitoring of SOC through sensors or lab testing periodically establishes the effectiveness of management practices, and can be considered as an optional QA/QC.

Parameter ID	AWD.26
Data/Parameter:	Yield per ha
Data unit:	tonnes/ha
Description:	Rice yield per hectare per crop
Source of data:	Monitoring Survey, Farm logbooks, interviews, sale or order receipts
Monitoring frequency:	Every cropping cycle
QA/QC procedures:	Slight variations in yield can happen over years. However, a decrease in yield is not allowed as per the methodology. Further, a sustained decrease in yield over multiple cropping cycles could be an indication of decreasing soil health, or other underlying reasons. In such a scenario, the developer shall apply default adjustment to account for the risk of SOC loss.
Any comment:	Yield will be compared with third party publications e.g., industry report.

Document Information

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1.0	07/07/2025	Initial adoption

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