

VERRA REVIEW FINDINGS REPORT

This report includes findings identified during Verra’s post-registration review of the below-mentioned project. The review was conducted pursuant to Section 6 of the *VCS Registration and Issuance Process*.

The VVB must:

1. Address the findings and provide responses in this report for Verra’s review.
2. Attach supporting documentation as needed.

Confidential information may be provided as separate attachments and should be clearly designated as such.

This report may be shared with the relevant accreditation body.

Project and Relevant Assessment(s)	1721, ONIL Stoves Guatemala Uspantan VCS Verification (Verification Report Issued on 06 September 2021) for MP3: 01/08/2018 - 31/08/2020. VCS Verification (Verification Report Issued on 18 February 2022) for MP4: 01/09/2020 to 19/12/2020. VCS Verification (Verification Report Issued on 18 February 2022) for MP5: 20/12/2020 to 30/09/2021.
Verra Program(s)	Verified Carbon Standard (VCS) Program
VVB	Earthood Services Private Limited.
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References	VCS Standard, v4.7; VCS Program Guide, v3.7; ISO 14064

Date of First Issue	29 July 2024
Due Date for Responses	16 August 2024
Review Conclusion	Approved
Date of Final Issue	03 February 2025

FINDINGS

Finding 1 – Determination of the proportion of installed cookstoves operating within the period not transparent

Issues

1. The proportion of operational cookstoves within the monitoring period(s) is reported to be 100%. This is likely unrealistic, given the minimal probability of 100% stove operation without breakages and abandonment over their lifetime. The project documentation does not transparently provide the measures put in place for on-time stove maintenance support for repairs and replacement.
2. The verification report does not provide a sufficiently detailed assessment of how the proportion of operational cookstoves was verified with cross-checking of on-ground monitoring raw data.
3. The monitoring report(s) does not provide sufficient information on how the samples for determining stoves in operation were selected and the sampling process used.

Action Required

1. The VVB must assess and confirm the completeness, conservativeness and accuracy of the corrective MRV practices and sampling procedures related to determining the proportion of operational cookstoves within the monitoring period(s) under review.
2. The VVB must cross-check the value(s) used in ERR calculations with the on-ground monitoring raw data, project database, sales record and maintenance/repair logbook to confirm the accuracy and consistency of the value.
3. The VVB must use objective evidence to independently assess information provided by the project proponent related to the corrective value applied, and ensure that the monitoring report and verification report are updated to include this corrective method, evidence and assessment.

Program Rule(s)

VCS Standard, v4.7, Sections 3.16.3 - 3.16.5

Background

Refer Annexure I

VVB Response

1. The VVB has assessed the corrective MRV practices and sampling procedures related to determining the proportion of operational cookstoves, and the details are discussed below:
 - a. The initial monitoring surveys resulted in 97.63% operability which was cross verified at the time through acceptance sampling by VVB. Since all sampled household results were consistent with monitoring data, the operability rate was accepted.
 - b. However, internal investigations by PP management revealed new information regarding the monitoring surveys which indicated issues with the monitoring practices which could potentially result in the monitoring survey showing higher operability rate than actual in target sampled population (through cherry picking of households). This approach was a result of introducing

biasness in the trainings that were conducted for the monitoring survey staff, who was informally trained to apply such practices which could compromise the representativeness of the survey results.

- c. Due to the unreliability of the monitoring survey data, the resulting 97.63% operationality rate has now been discarded. As an alternative for this parameter, results of a follow up sampling, which was conducted by PP in 2024 following Verra’s findings, were used to determining this parameter value. The suitability of using this data has been further discussed below.
- d. The operational stove percentage was determined by using the results from usage survey in 2024 and applying annual deration to previous years, thus basing the calculation on linear loss rate. The value has been compared with other approaches and has been confirmed as the most conservative among those, as discussed in points below.
- e. For this project and monitoring period, the new data collected was presented to VVB in the form of videos and photographs of devices collected during surveys. The photographs were time stamped and confirmed the geo-coordinates of the location where the photograph was clicked. The survey recorded information regarding operationality of the stoves and it reflected that 5 out of 11 stoves were operational in 2024 when this survey was conducted- thus indicating an operational rate of 45.45%. Based on this, calculations in the excel file “20241203 VERRA 6.1_1720 , 1721 _Survey results_deration rate_V1.0” were reviewed and ERs for following vintages were found to be consistently reported:
 Yr 2018 : 67.27% * 11,132 = 7,488 stoves
 Yr 2019 : 63.63% * 11,132 = 7,083 stoves
 Yr 2020 : 60.00% * 11,132 = 6,679 stoves
 Yr 2021 : 56.36% * 11,132 = 6,274 stoves
 where 11,132 is the number of stoves distributed and the percentages indicate the operationality rate calculated based on linear deration rate.
- f. Since this data was recorded recently and supported by evidence demonstrating sufficient data to conclude operationality of the stove along with data points to confirm date, time and location of the surveys, the data is found reliable.
- g. The samples selection for follow-up surveys was completely random. The sample selection was done live in presence of VVB representative and therefore, representativeness and randomness of the samples selected was confirmed.
- h. Additionally, the value obtained from these surveys was further cross-checked against the similar projects in the host country Guatemala across different registries and the average stove operationality rate is found to be 91.3%. The results of sampling from following projects were checked to calculate the average operational rate:

Program	Methodology	Project ID	MP
VCS	AMS-II.G	2077	MP1
GS	AMS-II.G	GS11213	MP1
GS	AMS-II.G	GS11212	MP1
GS	TPDDTEC	GS10457	MP1

GS	TPDDTEC	GS10457	MP2
GS	TPDDTEC	GS10457	MP3
GS	TPDDTEC	GS1321	MP1
GS	TPDDTEC	GS1321	MP2
GS	TPDDTEC	GS1321	MP3

All the projects listed above distribute plancha stoves in Guatemala with 10 years lifetime (except GS11213 and GS11212, which have 3 years lifetime), which is similar to Onil stove distributed in this project i.e. VCS 1720. Since The projects are found appropriate for comparison and therefore, considered as secondary data for comparing the operationality of the cookstoves.

Based on the principle of conservativeness, the lowest value of the parameter obtained from sources discussed above has been determined as for years 2018, 2019 and 2020 as 67.27%, 63.63% and 60% respectively. Therefore, the revised value is found to be acceptable and in line with these revisions, the ER sheet is found to be updated appropriately. The changes are reflected and assessed in the revised verification report.

2. The proportion of operational cookstoves was initially monitored through annual monitoring surveys by the project developer. The verification team cross-checked this parameter by applying acceptance sampling across the monitored samples database. Since all stoves were found operational during the acceptance sampling and the site observations were consistent with the monitoring data, the monitoring survey records were accepted. However, internal investigations by PP's management revealed new information as discussed above, thus compromising the representativeness of the monitoring survey. Therefore, the results from monitoring surveys are now discarded. As an alternative, the data from follow-up cross-check surveys conducted in 2024 was used, details of which are discussed in the point above. Although PP has not maintained a maintenance record of the stoves, supporting documents provided confirm that households are aware and appropriately trained to maintain and repair the project stoves.

The verification report is now revised to demonstrate the alternative method used. The new results provided in the MR and ER sheet were cross-checked with survey documents provided by PP.

The follow-up survey data was also cross-checked against the project database to conclude that all stoves covered under the survey were indeed part of the project. Accuracy and consistency of this value was confirmed through the survey evidence, project sales database and ER calculation sheet, as discussed above and detailed in the verification report.

The value obtained from follow-up survey was further cross-checked against the similar projects in the host country Guatemala across different registries and the average stove operationality rate is found to be 91.3%. Based on the principle of conservativeness, the lowest value of the parameter obtained from sources discussed above has been determined based on follow-up surveys.

3. The PP has provided new information according to which the method for determining samples for monitoring surveys was compromised, which included cherry picking the sample households by keeping a large amount of buffer samples and during the survey, not recording the responses of the households which reflected non-operationality of the project stoves. Therefore, results from this samples selection and survey have been discarded. The Monitoring report is now revised providing new information and details regarding the alternative method used.

VVB has utilized follow-up survey conducted by PP and cross-checked from other registered projects in the host country, to verify the appropriateness and conservativeness of the values applied by the PP, as discussed in above points. Thus, primary data has been utilized to re-calculate this parameter. Additionally, the sample selection was done live in presence of VVB representative and therefore, representativeness and randomness of the samples selected was confirmed. All evidence provided reflect that the follow-up surveys provide a reliable and conservative data source for the parameter documenting operationality of the stoves, based on further cross-check with similar projects. VVB has independently reviewed registered projects of the same host country. Therefore, the value reported for this project during the current monitoring period is found to be well within the range of other similar projects.

Verra Response

The VVB has re-checked the documentation and submissions from the PP on the revised usage rates of project stoves. The VVB acknowledges that at the time of the verification, there was material information, which was not made available to the VVB, that had an impact on the overall emission reductions by the project for the monitoring periods for MP3: 01/08/2018 - 31/08/2020, MP4: 01/09/2020 to 19/12/2020 and MP5: 20/12/2020 to 30/09/2021.

The VVB has reviewed the material information presented by the PP and based on the new information, the usage rate determined is lower than the one which was verified initially. The VVB reviewed the usage rate for the surveys which were carried out in 2024 and using the value obtained, an annual deration to previous years was applied with a fixed linear loss rate to arrive at usage rates for previous years. This form of backward extrapolation was considered conservative. The revised value was determined by following sound statistical procedures, whereby survey sampling was robust, and survey findings correctly analysed reviewed and found to be reliable.

In addition, the VVB also reviewed other similar cookstove projects within the region and established that they are using an average usage rate of 91.3%.

By opting for deration method to determine the usage rate from the value established in 2024 to determine the applicable values for 2018, 2019, 2020 and 2021, the VVB and the PP ensured that the values determined were conservative. VVB assessed that the approach is considered conservative and does not lead to overestimating emission reductions.

The resulting changes have been updated, and the Monitoring Reports and the Verification Reports have been revised.

The issue is closed.

ANNEXURE I

Background

The VVB must assess the accuracy, conservativeness, relevance, completeness, consistency, and transparency of the information provided by the project proponent, determine whether information/data provided by the project proponent is reliable, credible and complete, and base their findings and conclusions on objective evidence.

To assess the claims and assumptions in the MR, the VVB must not be limited to evidence provided by the project proponent and must describe all steps taken and sources of information used to cross-check the information contained in the MR. In doing so, the VVB must apply the means of verification required by the relevant Verra Standard, CDM accreditation standards and normative ISO documents, and standard auditing techniques, including, but not limited to:

- a. Document review involving cross-checks between the information provided in the MR, raw data and information from sources other than those used; if available, the VVB's sectoral or local expertise; and, if necessary, independent background investigations; and
- b. Follow-up actions (e.g., on-site inspection and telephone or email interviews), including:
 - i. Interviews with relevant stakeholders in the host country, such as personnel with knowledge of the project design and implementation.
 - ii. Cross-checks between information provided by interviewed personnel (i.e., by checking sources or other interviews) to ensure that no relevant information has been omitted.