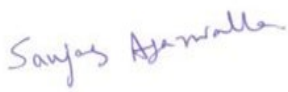


**Verification and certification report form for  
programme of activities**

**BASIC INFORMATION**

<b>Title and GS reference number of the programme of activities (PoA)</b>	Believe Green Safe Drinking Water PoA (GS ID: 5705)
<b>Version number(s) of the PoA-DD(s) to which this report applies</b>	Version 17 dated 13/05/2019
<b>GS ID (s) of the VPAs</b>	VPA - Spring Health – 1 (GS6513)
<b>Version number of the verification and certification report</b>	1.2
<b>Completion date of the verification and certification report</b>	12/03/2024
<b>Monitoring period number and duration of this monitoring period</b>	3 <sup>rd</sup> Monitoring period 01/09/2020 to 31/08/2021
<b>Version number of the monitoring report to which this report applies</b>	Version: 13 Dated: 14/12/2023
<b>Activity Requirements applied</b>	Community Services Activities
<b>Product Requirements applied</b>	GHG Emission Reduction & Sequestration
<b>Coordinating/managing entity (CME)</b>	Believe Green LLC
<b>Host Country</b>	Odisha, India
<b>Applied methodologies and standardized baselines</b>	Technologies and Practices to Displace Decentralized Thermal Energy Consumption” Version 3.1, August 2017
<b>Mandatory sectoral scopes</b>	3/3.1: Energy demand
<b>Name and GS reference number of the VVB</b>	E-0052: Carbon Check (India) Private Ltd.
<b>Name, position, and signature of the approver of the verification and certification report</b>	 Sanjay Kumar Agarwalla, Technical Director

## **SECTION A. Executive summary**

>>

### **Introduction:**

The Co-ordinating Managing Entity/Project Participant has appointed the VVB, Carbon Check (India) Private Ltd. (CC IPL) to perform independent verification of the GS Programme of Activities, “Believe Green Safe Drinking Water PoA” in India (hereafter referred to as “Programme of Activities or PoA”) for the VPA titled “VPA - Spring Health – 1 (GS6513)”.

The PoA involves reduction in biofuel consumption, such as wood, as is traditionally used to boil water to make it safe to drink. This is done by offering low-income populations affordable and easily accessible treated water that is safe to drink. Since these people usually use inefficient cook stoves that cause large amounts of smoke leading to respiratory diseases, the project also has significant health co-benefits. Also, the project generates significant employment and income opportunities for the local villagers, who are invited to join the project across the production and delivery chain replacement of less efficient cooking stoves using woody biomass with improved energy-efficient method to provide safe water the PoA will save on the consumption of woody biomass and do GHG emissions reduction.

The VPAs uses a simple electro-chlorination technology, called WATA, to produce chlorine, which is used to purify the water at the point of sale The WATA technology, developed by Antenna, uses a simple, manageable process of electrolysis to convert a measure of salt and water into sodium hypochlorite. The resulting solution can be used for drinking water chlorination.

The WATA is specifically designed for use in the context of communities in developing countries (range of 3 devices). With this system, communities can source locally and quickly available chlorine to protect against diarrheal diseases such as diarrhoea or dysentery. The purified water is replacing the less efficient water boiling baseline method by distributing safe drinking water. The CME and VPA implementer are responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the component project activities.

This report summarises the verification findings of the project, performed on the basis of Procedures, and GS4GG methodology requirements, as well as on the basis of given criteria for consistent project operations, monitoring, reporting, and the subsequent decisions by the Gold Standard Secretariat. Verification is required for all registered GS project activities intending to confirm their achieved emission reductions and proceed with a request for issuance of VERs. This report contains the findings and resolutions from the verification along with a certification statement for the certified emission reductions.

### **Scope:**

The scope of the verification is:

- To verify the project implementation and operation with respect to the registered VPA-DD /B03/
- To verify the implemented monitoring plan with the registered VPA-DD /B03/ and applied baseline and monitoring methodology /B01/.
- To verify that the actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan.
- To evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement.
- To verify that reported GHG emission data is sufficiently supported by evidence.

The verification shall ensure that the reported emission reductions /02/ are complete and accurate in order to be certified.

### **Verification process:**

The verification comprises a review of the monitoring report /01/ over the monitoring period from 01/09/2020 to 31/08/2021 and based on the registered VPA-DD /B03/ as part of the monitoring parameters and monitoring plan, emission reduction calculation spreadsheet /02/, monitoring methodology /B01/, and all related evidence provided by project participants. On-site interviews and inspections were performed during verification process.

## **Conclusion:**

The verification team assigned by the Validation & verification body (VVB) concludes that the monitoring report (Version 13 dated 14/12/2023) /01/, meet all relevant requirements of the Gold Standard as per the requirements of GS4GG. The verification has been conducted in-line with the GS4GG requirements.

The project activity was correctly implemented according to the selected monitoring methodology, monitoring plan and the registered PDD/B03/. The monitoring system was implemented, and maintained in a proper manner, while collected monitoring data allowed for the verification of the amount of achieved GHG emission reductions. Through the document review and On-site interviews, the verification team confirms that the project activity has resulted in the 9,359tCO<sub>2</sub>e SDG impact (as per ER)/02/ achieved in this monitoring period.

CC IPL as a Validation & verification body (VVB) is therefore pleased to issue a positive verification opinion expressed in the attached Certification statement.

## **SECTION B. Verification team**

### **B.1. Verification team, technical reviewer, and approver<sup>1</sup>**

Carbon Check (India) Private Ltd. has appointed a competent team as per the GS Accreditation Standard, GS4GG requirements, and CC IPL's internal procedures. Further details regarding team competence can be found in Appendix 2. The team is outlined below:

<b>Sr. No.</b>	<b>Role</b>	<b>Type of resource</b>	<b>Last name</b>	<b>First name</b>	<b>Affiliation</b> (e.g., name of central or other offices of VVB or outsourced entity)
1.	Team Leader/Technical Expert	IR	Sharma	Harish	CC IPL
2.	Assessor	IR	Bankar	Siddhant <sup>2</sup>	CC IPL
3.	Trainee assessor	IR	Verma	Aastha <sup>3</sup>	CC IPL
4.	Trainee assessor	IR	Yadav	Shalini	CC IPL
5.	Technical Reviewer	IR	C.	Indumathi	CC IPL
6.	Approver	IR	Singh	Sanjay Kumar	CC IPL

## **SECTION C. Application of materiality in conducting the verification**

### **C.1. Consideration of materiality in conducting the verification**

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<sup>1</sup> Confirming to the GS requirements of paragraph 2.2 of RU 2020 PR - PR, V1.2 (validation and verification by same VVB), VVB confirms that it was not involved in any kind of validation activity of the project.

<sup>2</sup> Siddhant banker has worked on this project till 30/10/2023.

<sup>3</sup> Aastha Verma has worked on this project till 30/07/2022

The project is a Micro-scale, project activity achieving total emission reductions of < 10,000 tons of CO<sub>2</sub>e per year; as such, a 10 percent materiality threshold is applied. The threshold of materiality was evaluated based on §9.6.3 (d) of GS validation and verification Version 1.0./B02/ It was concluded that the materiality threshold applicable to the project activity based on actual emission reductions achieved is 10% of GS5705 (VPA 1): 9,359 tCO<sub>2</sub>e which is equal to 935.9 tCO<sub>2</sub>e.

Based on the above information, a risk analysis is carried out in the following activities:

1. Monitoring system including the data input procedure (including relevant personnel and applicable template forms used)
2. Copy of the agreement between household and Project Participant (s) (origin of data)
3. Water source unique ID system
4. ER sheet (application of data)
5. Data flow
6. Data control procedures
7. Monitoring survey records

In conducting the verification, VVB took cognizance of §9.6.3 (d) of GS validation and verification Version 1.0./B02/ and based on the input of data from different sources checked through a sampling of records. Data flow was checked through a comparison of data in hand-written forms, electronic database, and ER sheet /2/. The competence of the personnel involved in conducting the water quality testing, recording of data, and calculation of the emission reduction data has been checked by the verification team by means of a review of the training documents.

The risks identified can be mitigated through cross check with all sets of documents. The verification team performed the following checks to mitigate the effects of the above-identified sources of error:

Mitigation of Human error risks: The verification team mitigated the risk by checking the training records of the personnel and assessing their competencies, skills, monitoring/testing procedure followed, understanding of the monitoring survey forms, protocol and testing procedure, etc. Further, data was crosschecked with the ER calculation spreadsheet /02/ and the sample raw data.

Mitigation due to error in the Information system: Verification team by conducting interviews with the personnel responsible for such activities mitigated the risk due to errors in an information system. It was confirmed through interviews that the raw data is collected by the field personnel and then transmitted and stored electronically at CME's office. The data quality control is maintained by the CME.

Accuracy of the measuring equipment: The risk due to inaccuracy in measurements was mitigated by reviewing the calibration certificates of all the project equipment.

Competence of personnel involved in conducting standardized tests: Verification team has reviewed the abilities, qualifications, and recognition of involved personnel and institutions of the measuring team. The tests/procedures have been carried out by well-trained personnel. The training certificate of the personnel has been provided to the verification team in this respect.

Mitigation due to an error in Sampling: The verification team mitigated the risk by checking the list of random samples generated for monitoring surveys for VPAs, and the sample size calculation sheet.

In conducting the verification, VVB took cognizance of §9.6.3 of GS validation and verification Version 1.0./B02/ and based on the input of data from different sources checked through sampling records.

Based on the assessment carried out, CCIPL confirms with a reasonable level of assurance that the claimed emission reductions are free from material errors, omissions, or misstatements.

## SECTION D. Means of verification

### D.1. Desk/document review

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The verification was performed primarily based on the review of the Monitoring report and the supporting documentation. This process included a review of data and information presented to verify their completeness and a review of the monitoring plan and monitoring methodology. Documents reviewed or referenced during the verification are listed in Appendix 3 below.

### D.2. On-site inspection

GS4GG Principal and requirement version 1.2/B02/ and GS site visit and on-site audit requirement v2.0/B02/, VVB is required to conduct an on-site inspection for large-scale project activity. Furthermore, an on-site visit is done for the verification activity. The following activities have been carried out during on-site visit.

The validation & verification team has carried out on-site interviews with enumerators involved in monitoring to assess the information included in the project design document, and stakeholder consultation report. During the desk review, the relevant records related to project design, implementation and operation were checked, stakeholders engaged, and implementing agency and on-site beneficiary interviews were taken on a sampling basis.

The verification team applied a sampling approach for on-site interviews as part of verification in accordance with paragraph 26 of the Standard: Sampling and surveys for CDM project activities and programs of activities, Version 09.0./B04-a/ In accordance with paragraph 28 of the sampling standard, acceptance sampling has been chosen by the verification team, and accordingly, the steps listed in paragraph 29 of the sampling standard were followed. So, in accordance with paragraph 39 (c) of the sampling standard the Verification team opted for AQL of 0.5% and UQL of 20%; producer risk of 10 %, and consumer risk of 10 % in determining the VVB's sample size for which the sample size (n) is 11 with acceptance number (c) 0.

### D.3. Interviews

Interviews of safe water end user was taken by a Verification team. All surveys were conducted in person and photos of end users and GPS coordinates were taken as records. Submitted photos, snapshots, and ER sheets maintained of the site survey were checked by the verification team to confirm. The VV plan was shared with the CME on dated 11/09/2023. In line with the VV plan, the VVB team has interviewed the PP team members involved in the survey and the 11 end users.

No.	Name	Organization	Date	Topic	Team member
/1/	Kishan Nanavati	Spring Health	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Discussion on the stated goal and policy of the PoA.</li> <li>• Discussion on sustainability, environmental impact, local stakeholders meeting procedure, baseline scenario, additionality, monitoring plan, Start date.</li> <li>• Discussion on the GS registered VPA-DDs, eligibility criteria and its compliance, ongoing financial need, SDG impact, eligibility criteria for, safeguarding</li> </ul>	Harish Sharma Siddhant Bankar

				<p>principles, stakeholder consultations and grievance mechanism in line with GS4GG, requirements.</p> <ul style="list-style-type: none"> <li>• Project implementation and operation, monitoring procedure, data and information flow</li> </ul>	
/2/	Krupa Paltasingh	Spring Health (Manager Operations)	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Discussion on the stated goal and policy of the PoA.</li> <li>• Discussion on sustainability, environmental impact, local stakeholders meeting procedure, baseline scenario, additionality, monitoring plan, Start date.</li> <li>• Discussion on the GS registered VPA-DDs, eligibility criteria and its compliance, ongoing financial need, SDG impact, eligibility criteria for, safeguarding principles, stakeholder consultations and grievance mechanism in line with GS4GG, requirements.</li> <li>• Project implementation and operation, monitoring procedure, data and information flow.</li> </ul>	Harish Sharma Siddhant Bankar
/3/	Chandan Jina	Spring health (Sales executive)	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Project implementation and operation, monitoring procedure, data and information flow.</li> <li>• Grievance received.</li> <li>• Water Distribution method.</li> <li>• Water transportation Method.</li> </ul>	Harish Sharma Siddhant Bankar
/4/	Manoj Kumar Pradhan	Spring Health (SMO)	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Project implementation and operation, monitoring procedure, data and information flow.</li> <li>• Grievance received.</li> <li>• Water Distribution method.</li> <li>• Water transportation Method.</li> </ul>	Harish Sharma Siddhant Bankar
/5/	Dhanneshwar Sahoo	Spring Health (Sales Executive)	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Project implementation and operation, monitoring procedure, data and information flow.</li> <li>• Grievance received.</li> <li>• Water Distribution method.</li> </ul>	Harish Sharma Siddhant Bankar

				<ul style="list-style-type: none"> <li>• Water transportation Method.</li> </ul>	
/6/	Benudhar Paikaray	Spring Health (Sales Executive)	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Project implementation and operation, monitoring procedure, data and information flow.</li> <li>• Grievance received.</li> <li>• Water Distribution method.</li> <li>• Water transportation Method.</li> </ul>	Harish Sharma Siddhant Bankar
/7/	Rupaj Kumar Pradhan	Spring Health (Sales Executive)	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Project implementation and operation, monitoring procedure, data and information flow.</li> <li>• Grievance received.</li> <li>• Water Distribution method.</li> <li>• Water transportation Method.</li> </ul>	Harish Sharma Siddhant Bankar
/8/	Sukan Takumar Tripathy	Spring Health (Sales Executive)	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Project implementation and operation, monitoring procedure, data and information flow.</li> <li>• Grievance received.</li> <li>• Water Distribution method.</li> <li>• Water transportation Method.</li> </ul>	Harish Sharma Siddhant Bankar
/9/	Biplab Maratha	Spring Health (Sales Executive)	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Project implementation and operation, monitoring procedure, data and information flow.</li> <li>• Grievance received.</li> <li>• Water Distribution method.</li> <li>• Water transportation Method.</li> </ul>	Harish Sharma Siddhant Bankar
/10/	Ghanashyam Nayak	End User	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Portion of users of project safe water supply who were already in baseline using a non-boiling safe water supply (<math>C_j</math>)</li> <li>• Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day (<math>Q_{p,y}</math>)</li> <li>• Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. (<math>X_{boil}</math>)</li> <li>• Number of persons. Day consuming water supplied by project scenario p (<math>N_{p,y}</math>)</li> </ul>	Harish Sharma Siddhant Bankar
/11/	Dambarudhar Behar	End User	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Portion of users of project safe water supply who were already</li> </ul>	Harish Sharma



				<p>in baseline using a non-boiling safe water supply (<math>C_j</math>)</p> <ul style="list-style-type: none"> <li>Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day (<math>Q_{p,y}</math>)</li> <li>Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. (<math>X_{boil}</math>)</li> </ul> <p>Number of persons. Day consuming water supplied by project scenario p (<math>N_{p,y}</math>)</p>	Siddhant Bankar
/12/	Ganesh Sahoo	End User	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>Portion of users of project safe water supply who were already in baseline using a non-boiling safe water supply (<math>C_j</math>)</li> <li>Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day (<math>Q_{p,y}</math>)</li> <li>Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. (<math>X_{boil}</math>)</li> <li>Number of persons. Day consuming water supplied by project scenario p (<math>N_{p,y}</math>)</li> </ul>	Harish Sharma Siddhant Bankar
/13/	Rabindra Mohapatra	End User	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>Portion of users of project safe water supply who were already in baseline using a non-boiling safe water supply (<math>C_j</math>)</li> <li>Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day (<math>Q_{p,y}</math>)</li> <li>Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. (<math>X_{boil}</math>)</li> <li>Number of persons. Day consuming water supplied by project scenario p (<math>N_{p,y}</math>)</li> </ul>	Harish Sharma Siddhant Bankar
/14/	Niranjan Behera	End User	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>Portion of users of project safe water supply who were already</li> </ul>	Harish Sharma



				<p>in baseline using a non-boiling safe water supply (<math>C_j</math>)</p> <ul style="list-style-type: none"> <li>• Quantity of safe water in litres consumed in the project scenario <math>p</math> and supplied by project technology per person per day (<math>Q_{p,y}</math>)</li> <li>• Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. (<math>X_{boil}</math>)</li> <li>• Number of persons. Day consuming water supplied by project scenario <math>p</math> (<math>N_{p,y}</math>)</li> </ul>	Siddhant Bankar
/15/	Naba Kishore Sahoo	End User	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Portion of users of project safe water supply who were already in baseline using a non-boiling safe water supply (<math>C_j</math>)</li> <li>• Quantity of safe water in litres consumed in the project scenario <math>p</math> and supplied by project technology per person per day (<math>Q_{p,y}</math>)</li> <li>• Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. (<math>X_{boil}</math>)</li> <li>• Number of persons. Day consuming water supplied by project scenario <math>p</math> (<math>N_{p,y}</math>)</li> </ul>	Harish Sharma Siddhant Bankar
/16/	Mukunda Ch. Behera	End User	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Portion of users of project safe water supply who were already in baseline using a non-boiling safe water supply (<math>C_j</math>)</li> <li>• Quantity of safe water in litres consumed in the project scenario <math>p</math> and supplied by project technology per person per day (<math>Q_{p,y}</math>)</li> <li>• Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. (<math>X_{boil}</math>)</li> <li>• Number of persons. Day consuming water supplied by project scenario <math>p</math> (<math>N_{p,y}</math>)</li> </ul>	Harish Sharma Siddhant Bankar
/17/	Kanhu Charan Jena	End User	14/09/2023-	<ul style="list-style-type: none"> <li>• Portion of users of project safe water supply who were already</li> </ul>	Harish Sharma

			15/09/2023	<p>in baseline using a non-boiling safe water supply (<math>C_j</math>)</p> <ul style="list-style-type: none"> <li>• Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day (<math>Q_{p,y}</math>)</li> <li>• Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. (<math>X_{boil}</math>)</li> <li>• Number of persons. Day consuming water supplied by project scenario p (<math>N_{p,y}</math>)</li> </ul>	Siddhant Bankar
/18/	Alok Parida	End User	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Portion of users of project safe water supply who were already in baseline using a non-boiling safe water supply (<math>C_j</math>)</li> <li>• Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day (<math>Q_{p,y}</math>)</li> <li>• Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. (<math>X_{boil}</math>)</li> <li>• Number of persons. Day consuming water supplied by project scenario p (<math>N_{p,y}</math>)</li> </ul>	Harish Sharma Siddhant Bankar
/19/	Bijaya Mallick	End User	14/09/2023-15/09/2023	<ul style="list-style-type: none"> <li>• Portion of users of project safe water supply who were already in baseline using a non-boiling safe water supply (<math>C_j</math>)</li> <li>• Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day (<math>Q_{p,y}</math>)</li> <li>• Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. (<math>X_{boil}</math>)</li> <li>• Number of persons. Day consuming water supplied by project scenario p (<math>N_{p,y}</math>)</li> </ul>	Harish Sharma Siddhant Bankar
/20/	Minaketaan Sutar	End User	14/09/2023-	<ul style="list-style-type: none"> <li>• Portion of users of project safe water supply who were already</li> </ul>	Harish Sharma

			15/09/2023	in baseline using a non-boiling safe water supply ( $C_j$ ) <ul style="list-style-type: none"> <li>• Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day (<math>Q_{p,y}</math>)</li> <li>• Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. (<math>X_{boil}</math>)</li> <li>• Number of persons. Day consuming water supplied by project scenario p (<math>N_{p,y}</math>)</li> </ul>	Siddhant Bankar
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#### D.4. Sampling approach

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As assessed in the above sections, emission reductions for the “VPA - Spring Health – 1 (GS6513)” are being claimed for this monitoring period and the total population is spread across around 234 villages within the state of Odisha India. Monitoring survey was conducted from 100 end users from all 234 villages.

The monitoring parameters required to be monitored through the sampling plan are:

1. Portion of users of project safe water supply who were already in baseline using a non-boiling safe water supply ( $C_j$ )
2. Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day ( $Q_{p,y}$ )
3. Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. ( $X_{boil}$ )
4. Number of persons. Day consuming water supplied by project scenario p ( $N_{p,y}$ )

The verification team applied a sampling approach for on-site interviews as part of verification in accordance with paragraph 26 of the Standard: Sampling and surveys for CDM project activities and programs of activities, Version 09.0. In accordance with paragraph 28 of the sampling standard, acceptance sampling has been chosen by the verification team, and accordingly, the steps listed in paragraph 29 of the sampling standard were followed. So, in accordance with paragraph 39 (c) of the sampling standard the Verification team opted for AQL of 0.5% and UQL of 20%; producer risk of 10 %, and consumer risk of 10 % in determining the VVB’s sample size for which the sample size (n) is 11 with acceptance number (c) 0.

As per the 'Guideline: Sampling and surveys for CDM project activities and programmes of activities, version 04.0', paragraph 4. Sampling requirements point no 10 states<sup>4</sup>, “Where there is no specific guidance in the applicable methodology, project proponents shall use 95/10 confidence/precision as the criteria for the reliability of sampling efforts for small-scale project activities”.

As per paragraph 4, project participants or the coordinating/managing entity have implemented the sampling and surveys according to the sampling plan in the registered monitoring plan. The verification includes determining:

- (a) Whether the required confidence/precision has been met.
- (b) Whether the selected sample was representative of the population.

<sup>4</sup> [https://cdm.unfccc.int/Reference/catalogue/document?doc\\_id=000003360#\\_Toc362602343](https://cdm.unfccc.int/Reference/catalogue/document?doc_id=000003360#_Toc362602343)

Furthermore, the sampling plan implemented by the CME is in accordance with the applied approved monitoring methodology and the PoA-DD/VPA-DD/B03/. The CME has appropriately performed the Sampling procedure in line with the applied methodology and PoA-DD / VPA-DD./B03/

The necessary confidence/precision of 95/10 for each of the parameters is met. This has been cross verified by the verification team from the supporting documents submitted. During this monitoring exercise

## SECTION E. Verification findings

### E.1. General

#### E.1.1. Compliance of the monitoring report with the monitoring report form

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	<p>CME has used the GS4GG template Monitoring Report, version 1.1. The verification team confirms that the latest available version of the monitoring report template has been used by the CME and the MR is in compliance with the monitoring report form and related template guide Monitoring Report, version 1.1.</p> <p>This confirms compliance with the §336 and §337 of CDM VVS for PoAs, version 3.0 and GS4GG requirements./B02/</p>

#### E.1.2. Remaining forward action requests from validation and/or previous verifications

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Not Applicable

### E.2. Programme of activities

#### E.2.1. Compliance of the program implementation with the registered program design document

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	<p>CC IPL by means of on-site interview and document provided by the CME confirms that all physical features (technology, project equipment, and monitoring equipment) of the included VPAs in the PoA are in place and that the coordinating/managing entity has operated the PoA and the VPAs as per the PoA-DD and the VPA-DD.</p> <p>The verification team confirms the actual operation of the VPA and PoA implementation and operation in compliance with the PoA-DD / VPA-DD in order to confirm the compliance of § 17 of GS VVS, Version 1.0 and GS4GG rules and requirements v1.2/B02/.</p>

#### E.2.2. Implementation and operation of the management system

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	<p>The PoA management system including the record-keeping system has been explained in the PoA. During verification, the verification team based on a review of provided documents and on site discussion has assessed this management system. The verification team evaluated the management systems in place to implement the monitoring of the project activity. This included the roles and responsibilities of the monitoring staff, data collection, transfer and aggregation procedures, data storage, and archiving procedure for the monitoring system.</p>

	<p>Monitoring surveys were conducted by the implementation partner of Believe greens.</p> <p>To ensure the completeness and accuracy of monitoring information, an electronic database is operated and maintained by the VPA implementer. This information is further maintained by the CME. The data is further periodically checked by the CME to ensure there is no double counting. This provision for the avoidance of double counting as outlined in the PoA management system has been verified by means of review records of the sales database and on-site interviews during the course of verification.</p> <p>The responsibilities and authorities for monitoring and reporting are in accordance with the responsibilities and authorities stated in the monitoring plan provided in VPA-DD. The details about the monitoring system have been provided in the Monitoring report.</p> <p>The verification team confirms that the monitoring management system of the GS4GG PoA is in place, with the responsibilities properly identified and in place. This confirms the compliance of § 17.4.8 of GS VVS version 1.0 and GS4GG requirements. /B02/</p>
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### E.3. Voluntary project activities

#### E.3.1. Compliance of the VPA implementation with the included VPA design document

<b>Means of verification</b>	Document Review, Interview														
<b>Conclusion</b>	<p>The implementation status of the PoA and the voluntary project activities is:</p> <table border="1" style="width: 100%;"> <tr> <td><b>Project Participants:</b></td> <td>Believe Greens</td> </tr> <tr> <td><b>Title of PoA:</b></td> <td>Believe Green Safe Drinking Water PoA</td> </tr> <tr> <td><b>GS Reference No:</b></td> <td>PoA – GS5705 GS6513 (VPA 1)</td> </tr> <tr> <td><b>Applied Baseline and monitoring methodology:</b></td> <td>Technologies and Practices to Displace Decentralized Thermal Energy Consumption” Version 3.1, August 2017/B02/</td> </tr> <tr> <td><b>Project Scale:</b></td> <td>Microscale</td> </tr> <tr> <td><b>Location of the project activity:</b></td> <td>Odisha, India</td> </tr> <tr> <td><b>Reported monitoring Period verified in this verification:</b></td> <td>01/09/2020 - 31/08/2021 (Both days inclusive)</td> </tr> </table> <p>The VPAs distribute safe water. Safe water under the VPA uses simple electro-chlorination technology, called WATA to purify the water. It is the efficient way to purify water, thus end user using fuelwood to boil the water will be saved.</p> <p>The number of total safe water served under VPAs has been confirmed by the monitoring database i.e, 15,784,890 Litres.</p> <p>It was confirmed that Believe greens is the Coordinating/Managing Entity for the PoA. The actual voluntary project activity/ies are in line with the VPAs. Spring health is the VPA implementer for the VPA.</p>	<b>Project Participants:</b>	Believe Greens	<b>Title of PoA:</b>	Believe Green Safe Drinking Water PoA	<b>GS Reference No:</b>	PoA – GS5705 GS6513 (VPA 1)	<b>Applied Baseline and monitoring methodology:</b>	Technologies and Practices to Displace Decentralized Thermal Energy Consumption” Version 3.1, August 2017/B02/	<b>Project Scale:</b>	Microscale	<b>Location of the project activity:</b>	Odisha, India	<b>Reported monitoring Period verified in this verification:</b>	01/09/2020 - 31/08/2021 (Both days inclusive)
<b>Project Participants:</b>	Believe Greens														
<b>Title of PoA:</b>	Believe Green Safe Drinking Water PoA														
<b>GS Reference No:</b>	PoA – GS5705 GS6513 (VPA 1)														
<b>Applied Baseline and monitoring methodology:</b>	Technologies and Practices to Displace Decentralized Thermal Energy Consumption” Version 3.1, August 2017/B02/														
<b>Project Scale:</b>	Microscale														
<b>Location of the project activity:</b>	Odisha, India														
<b>Reported monitoring Period verified in this verification:</b>	01/09/2020 - 31/08/2021 (Both days inclusive)														

	<p>The information (including data and variables) provided in the MR /01/ is in line with the details provided in the VPA-DD.</p> <p>CC IPL’s verification team considers the project description of the project contained in the PoA and the VPAs to be complete and accurate. The VPAs comply with the relevant methodology, tools, forms, and guidance.</p> <p>In accordance with §17.4.10 (c) of GS VVS version 1/B02/, the verification team confirms that there is no information (data and variables) in the current monitoring period that are different from that stated in the approved revised VPA-DD which has caused an increase in the estimates of GHG emission reductions.</p> <p>The verification team has assessed the project to check any proposed or actual changes to the project design, In the opinion of CC IPL, there is no change to the project design. After reviewing the data shared by CME, CC IPL’s verification team confirms that the VPAs are implemented within the boundary of the PoA as described in the PoA-DD.</p> <p>CC IPL’s verification team confirms that the VPAs are implemented within the boundary of the PoA as described in the PoA and the implementation and operation of the project activity have been conducted in accordance with the description contained in the PoA-DD and VPA-DD.</p>
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### E.3.2. Compliance with the registered monitoring plan with applied methodologies and standardized baselines & registered monitoring plan

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	<p>The verification team can confirm that the monitoring plan contained in the VPAs is in accordance with the approved methodology applied by the project activity, i.e., Technologies and Practices to Displace Decentralized Thermal Energy Consumption” Version 3.1, August 2017. /B01/</p> <p>The monitoring has been carried out in accordance with the monitoring plan contained in the VPA-DD. This conclusion has been made based on the assessment below.</p> <p>The verification took cognizance of § 17.4.7 to § 17.4.12 of GS VVS, Version 1.0 and GS4GG requirements/B02/.</p>

#### E.3.2.1. Data and parameters fixed ex-ante or at the renewal of crediting period.

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	<p><b>Changes to project design of approved project:</b></p> <p>Fuel required to boil 1 litre of water (Wb,y,wood [tonnes/L]) was modified as required by GS-Rule Update – ‘Application of TPDDTEC Methodology to Safe Water Supply Projects’ - 03/05/2021.</p> <p>CO2 Emission Factor wood (EFb,wood,CO2 [tCO2/TJ]) and CH4 and N2O Emission Factor for wood (EFb,wood,nonCO2 [tCO2/TJ]) were modified as required by GS-Methodology -Emission reduction from safe drinking water supply V.1.0.</p> <p>The verification team confirms that the Data and parameters fixed ex-ante are in compliance with the VPAs and the monitoring plan. Please refer to Appendix 5 for a detailed analysis of the ex-ante parameters.</p>

	The verification took cognizance of § 17.4.12 of GS VVS v1.0 and GS4GG requirements.
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### E.3.2.2. Data and parameters monitored.

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	<p>The Verification team confirms that the Data and parameters monitored are in compliance with the VPA-DD and the monitoring plan. A complete assessment of each of the monitored parameters has been provided in Appendix 6 of this report.</p> <p>The verification took cognizance of § 17.4.12 of GS VVS v1.0 and GS4GG requirements.</p>

### E.3.2.3. Implementation of sampling plan

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	<p>Monitoring surveys were conducted during the current monitoring period. The total number of litres safe water served under VPA considered for the monitoring period is 15,784,890.</p> <p>The monitoring parameters monitored through the sampling plan are:</p> <ol style="list-style-type: none"> <li>1. Portion of users of project safe water supply who were already in baseline using a non-boiling safe water supply (<math>C_j</math>)</li> <li>2. Quantity of safe water in litres consumed in the project scenario <math>p</math> and supplied by project technology per person per day (<math>Q_{p,y}</math>)</li> <li>3. Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity. (<math>X_{boil}</math>)</li> <li>4. Number of persons. Day consuming water supplied by project scenario <math>p</math> (<math>N_{p,y}</math>)</li> </ol> <p>Across VPA random sampling was applied for the VPA by CME for the selection of the monitoring samples with 95/10 confidence/precision for all the parameters of annual monitoring which is deemed acceptable as per the PoA and VPAs.</p> <p>Applying the random number generator, the respondents were randomly picked from the defined population up to the required sample size as calculated by the CME. The verification team confirms that the applied method for sample size calculation is in accordance with the PoA-DD / VPA-DD.</p> <p>The sampling plan implemented by the CME is in accordance with the applied approved monitoring methodology and the PoA/ VPA-DD. The CME has appropriately performed the Random Sampling procedure in line with the applied methodology and is best suited for this type of project. As the PoA mentions the option for a random Sampling procedure, it is acceptable to the verification team.</p> <p>The necessary confidence/precision of 95/10 for each of the parameters is met. This has been cross verified by the verification team from the supporting documents submitted.</p> <p>The verification team applied a sampling approach for on-site interviews as part of verification in accordance with paragraph 26 of the Standard: Sampling and surveys for CDM project activities and programs of activities, Version 09.0. In accordance with paragraph 28 of the sampling standard, acceptance sampling</p>



	<p>has been chosen by the verification team, and accordingly, the steps listed in paragraph 29 of the sampling standard were followed. So, in accordance with paragraph 39 (c) of the sampling standard the Verification team opted for AQL of 0.5% and UQL of 20%; producer risk of 10 %, and consumer risk of 10 % in determining the VVB's sample size for which the sample size (n) is 11 with acceptance number (c) 0.</p> <p>The information provided in the monitoring survey, has been cross checked during onsite inspections. As a part of acceptance sampling, the Verification team could confirm the monitoring survey data with no discrepant records. Thus, PP's set of records has been accepted in line with § 33 of the Sampling and surveys for CDM project activities and programmes of activities CDM sampling standard, version 09 /B04-a/. The verification took cognizance of "Technologies and Practices to Displace Decentralized Thermal Energy Consumption" Version 3.1, August 2017"/B01/.</p>
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### E.3.3. Compliance with the calibration frequency requirements for measuring instruments.

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	Not applicable.

### E.3.4. Emission Reduction Quantification

Assessment of data and calculation of emission reductions or net removals in line with the requirement of Gold Standard Methodology. Technologies and Practices to Displace Decentralized Thermal Energy Consumption" Version 3.1, August 2017/B01/ the verification team has reviewed the Monitoring report /01/ and ER spreadsheets /02/ to check the arithmetic calculation of the emission reductions. The equation used for the calculation is compared with those provided in the VPA and The Gold Standard Methodology. Technologies and Practices to Displace Decentralized Thermal Energy Consumption" Version 3.1, August 2017/B01/.

#### E.3.4.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	<p>Fuel consumption is "back calculated" by multiplying the safe water consumption of end users observed in the project scenario by the amount of fuel required to boil a specific quantity of water.</p> <p>The general formula proposed in the GS methodology is:</p> $B_{b,y} = \text{Number of person-days} * \text{Total Safe Water consumed in project scenario (L/p/d)} * \text{Baseline Fuel used to Treat Water (T/L)}$ $B_{p,y} = [ (1-X_{boil}) * (1-C_j) * N_{j,y} * (Q_{j,y} + Q_{j,rawboil,y}) ] * W_{i,y}$ <p>Where:</p> <p><math>N_{j,y}</math>                      Number of person days consuming water supplied by project scenario p through year y</p> <p><math>C_j</math>                              Expressed as a percentage, this is the portion of users of the project technology j who in the baseline were already consuming safe water without boiling it</p> <p><math>X_{boil}</math>                           Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity</p> <p><math>Q_{p,y}</math>                           Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day</p>

	<p><math>Q_{p,rawboil,y}</math> Quantity of raw water boiled in the project scenario p per person per day</p> <p><math>W_{b,y}</math> Quantity of fuel in tons required to treat 1 litre of water using technologies representative of baseline scenario b during project year y, as per Baseline Water Boiling Test</p> <p>The above formula measures water consumption in terms of volume per person per day. However, as mentioned in note 43 of page 35 of the GS Methodology, other metrics can be applied as is applicable in a given project scenario. Indeed, here we propose a metric that is more precise and better suited to the current project: we are able to measure directly the total amount of safe drinking water consumed.</p> <p>In the above equation, the terms between square brackets, <math>(1-C_j) * N_{j,y} * (Q_{j,y} + Q_{j,rawboil,y})</math>, represent the total amount of safe water consumed by the entire population, and measure in liters per year. We can therefore include a new variable.</p> <p><math>QP_{Wy}</math> Quantity of purified water consumed in year y (measured in litres) as, where.</p> $QP_{Wy} = N_{j,y} * (Q_{j,y} + Q_{j,rawboil,y})$ <p>The number of persons consuming water supplied by project scenario p will be:</p> $N_j = HH * n_j$ <p>Where:</p> <p>HH number of hold house</p> <p><math>n_j</math> Average household size</p> <p>An important reason for defining the variable <math>QP_{Wy}</math> is that in the project is measuring it directly in the Total Sales Record, it is the number of litres of purified water sold by Spring Health within the project boundary in a given year.</p> <p>Therefore, it is assumed that the total number of litres sold corresponds also to the total amount of safe drinking water consumed <math>QP_{Wy}</math>. In other words, the quantity <math>QP_{Wy}</math> – which is measured directly – eliminates the need to measure <math>N_{j,y}</math> (the number of person. Days) and <math>Q_{j,y}</math> (the amount of water consumed on average per person), which are an indirect and less precise way to measure <math>QP_{Wy}</math> via the above formula.</p> <p>Summarizing, the quantity of fuel consumed in the baseline scenario can be expressed as:</p> $B_{p,y} = (1-X_{boil}) * (1-C_j) * QP_{Wy} * W_{i,y}$ <p>VVB confirmed that the baseline calculation used is found to be in line with registered VPA-DD, which is in cognizance with §17.4.12 GS VVS v1.0./B02/</p>
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#### E.3.4.2. Calculation of project GHG emissions or actual net GHG removals by sinks

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	The fuel emissions at the point of use in the project are zero. The reason is that the water does not need to be treated, for example by boiling. The formulas below derive this formally by adopting the model used in the GS Methodology/B01/.

$B_{p,j}$  = Number of person. Days \* Total volume of water boiled in project scenario (L/p/d) \* Project Fuel used to boil water (T/L)

$$B_{p,y} = [(1-X_{\text{boil}}) * (1-C_j) * N_{p,y} * (Q_{p,\text{rawboil},y} + Q_{p,\text{cleanboil},y})] * W_{p,y}$$

Where:

$N_{p,y}$  Number of person Days consuming water supplied by project scenario p through year y

$C_j$  Expressed as a percentage, this is the portion of users of the project technology j or who in the baseline were already consuming safe water without boiling it

$X_{\text{boil}}$  Percentage of premises that would have used other non-GHG emitting technologies like chlorine treatment techniques, if available, in the absence of the project activity.

$B_{p,y}$  Quantity of fuel consumed in project scenario p during the year y in tons

$Q_{p,\text{rawboil},y}$  Quantity of raw water boiled in the project scenario p per person per day

$Q_{p,\text{cleanboil},y}$  Quantity of safe water boiled in the project scenario p per person per day

$W_{p,y}$  Quantity of wood fuel or fossil fuel in tons required to treat 1 litre of water per day using technologies representative of the project scenario p during project year y

Redefining the terms within the square brackets as:

$QP_{Wy}$  Quantity of purified water consumed in year y (measured in litres) as, where  $QP_{Wy} = N_{p,y} * (Q_{p,\text{rawboil},y} + Q_{p,\text{cleanboil},y})$

Which again leads to the formula for the quantity of fuel consumed in the baseline scenario can be expressed as:

$$B_{p,y} = (1-X_{\text{boil}}) * (1-C_j) * QP_{Wy} * W_{i,y}$$

Since no fuel is being burnt to boil the water,  $W_{i,y} = 0$ . As a result  $B_{p,y} = 0$  and it follows that the project emissions  $PE_{p,y}$  are also equal to zero  $PE_{p,y} = 0$ .

**Cumulative usage rate for technologies in project scenario p during year y, based on cumulative installation rate and drop off rate ( $U_{p,y}$ )**

In this project, end users purchase clean water from Spring Health in jerry cans, which they then use at home over the next few days. Once the water runs out, they can purchase another jerry can.

For this reason, for the water purchased used a drop off rate of  $U_{p,y} = 1\%$ .

It is then found to be in line with TPDDTEC Methodology<sup>5</sup>/B01/

<sup>5</sup> Annex 9. Guidelines for carrying out usage surveys for projects implementing household water filtration technologies. In TPDDTEC Version 3.0. 'It should be noted that these guidelines are only applicable to point of use HWT filtration technologies (e.g. sand filters, clay filters, ceramic filters, hollow fibre filters, bio-sand filters etc.) and not to safe water supply projects such as chlorine treatment, solar disinfection, bore wells, piped water supply'.

	VVB confirmed that the baseline calculation used is found to be in line with registered VPA-DD/B03/, which is in cognizance with §17.4.12 GS VVS v1.0./B02/
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### E.3.4.3. Calculation of leakage GHG emissions

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	<p>The CME has investigated the following potential sources of leakage:</p> <ul style="list-style-type: none"> <li>a) The displaced baseline technologies are reused outside the project boundary in place of lower emitting technology or in a manner suggesting more usage than would have occurred in the absence of the project. There will be no displaced baseline technology as households will continue to cook using the cook stoves they own. Therefore, there will be no leakage impact to consider for this point.</li> <li>b) The non-renewable biomass or fossil fuels saved under the project activity are used by non- project users who previously used lower emitting energy sources. The volume of water treated by boiling in the baseline consumes a fractional portion of the biomass used by families. Biomass is currently non-renewable and expensive for families. It is highly unlikely that any biomass saved by the project activity will significantly reduce biomass costs outside the project boundary. Therefore, the project proponent assigns a value of 0 to this leakage parameter.</li> <li>c) The project significantly impacts the NRB fraction within an area where other CDM or VER project activities account for NRB fraction in their baseline scenario. The small size of the project is unlikely to have a significant impact on the NRB fraction. Therefore, the leakage arising from significantly impacting NRB is considered null.</li> <li>d) The project population compensates for loss of the space heating effect of inefficient technology by adopting some other form of heating or by retaining some use of inefficient technology. In India households rarely, if ever, use stoves for heating as the temperature is rarely below 20°C all year long. Therefore, it is unlikely that the project activity will result in increased use of biomass for space heating effects. Thus, the project proponent assigns a value of 0 to this leakage parameter.</li> <li>e) By virtue of promotion and marketing of a new technology with high efficiency, the project stimulates substitution within households who commonly used technology with relatively lower emissions, in cases where such a trend is not eligible as an evolving baseline. This leakage parameter is not applicable in this project, where the activity is provisioning of a water treatment system. The project proponent will not be involved in promoting any particular stove or fuel type. Therefore, the project proponent assigns a value of 0 to this leakage parameter.</li> <li>f) other sources of leakage:</li> </ul> <p><b>Leakage I: WATA</b></p> <p>The water is purified using chlorine that is produced with the WATA electro chlorinator apparatus. In other words, electricity is used in the process, and it should be accounted as follows:</p> <ol style="list-style-type: none"> <li>1. The Maxi-WATA uses 57.6Wh/L to produce one liter of chlorine<sup>6</sup>.</li> </ol>

<sup>6</sup> Source: Maxi-WATA Operating Instructions. Antenna Water. Page 3. Weblink: [http://www.antenna.ch/en/medias/maxi\\_wata\\_EN.pdf](http://www.antenna.ch/en/medias/maxi_wata_EN.pdf). Based on the data on page 3, the figure is calculated as follows 125L require 10hours of Maxi-Wata operating at 720W, which results in 57.6Wh/L.

2. Each Liter of chlorine purifies 4,000 L of water<sup>7</sup>, meaning that each Liter of water requires 0.0144 Wh/L (i.e., 57.6Wh / 4,000 L).
3. On average, generating electricity produces CO<sub>2</sub> at a rate of  $6.89 \cdot 10^{-4}$  tCO<sub>2</sub> / kWh<sup>8</sup>.
4. Bringing all this together, the Maxi-WATA produces  $WATA_{CO_2} = 10^{-9}$  tCO<sub>2</sub>/L

Summarizing, the only source of leakage is from the CO<sub>2</sub> emissions from the electricity used to produce the chlorine, which produces carbon at a rate  $WATA_{CO_2} = 10^{-9}$  tCO<sub>2</sub>/L. To obtain the total leakage, we multiply this factor by the total number of Liters of purified water sold:

$$L_y = QP_W \cdot WATA_{CO_2}$$

#### Leakage II: Rickshaws

Another source of emissions arises from the distribution of the Jerry Cans containing purified Spring Health water. Jerry cans are distributed mostly by motorized rickshaws.

To measure the emissions from rickshaw transportation, we need to:

1. Measure the average distance taken to distribute 1L of water (km/L).
2. Measure the emissions factor for a rickshaw (tCO<sub>2</sub>/km)
3. Calculate the amount of CO<sub>2</sub> emitted per liter distributed (tCO<sub>2</sub>/L).
4. By multiplying the above by the number of liters sold, we can calculate the number of tons emitted per year for the entire project.

#### Leakage calculated for this monitoring period is as follows:

The variables involved in this process have not changed during the crediting period, i.e.:

#### Leakage I: WATA

Electricity used to produce the chlorine, which produce carbon at a rate:  
 $WATA_{CO_2} = 9.92E-09$  tCO<sub>2</sub>/L

#### Leakage II: Rickshaws

Rickshaws CO<sub>2</sub> =  $4.00E-07$  tCO<sub>2</sub>/L

#### Total Leakage for this MP:

Leakage (WATA + Rickshaws) =  $4.0992E-07$  tCO<sub>2</sub>/L \* 15,784,890 L  
 = 6 tCO<sub>2</sub>.

VVB confirmed that the Leakage calculation used is found to be in line with registered VPA-DD/B03/, which is in cognizance with §17.4.12 GS VVS v1.0./B02/

7 Source: <http://www.antenna.ch/en/research/safe-water/wata-description>

8 Source: U.S. Environmental Protection Agency: <http://www.epa.gov/cleanenergy/energy-resources/refs.html>

**E.3.4.4. Summary of calculation of GHG emission reductions or net GHG removals by sinks**

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	<p>The verification team confirms that all parameters are used correctly in the calculations, all results are verifiable and transparent, all assumptions are described and based on verifiable evidence, and calculations are done in accordance with the pre-defined formulae from VPAs. The total number of ERs achieved during the monitoring period for VPA is 9,359 VERs.</p> <p>In summary, the verification team confirms that the actual emission reduction is lower than the estimate of the VPAs for the current monitoring period.</p> <p>VVB confirmed that the baseline calculation used is found to be in line with registered VPA-DD/B03/, which is in cognizance with §17.4.12 GS VVS v1.0./B02/</p>

Title and GS reference number of the VPA	Baseline emissions or baseline net GHG removals by sinks (tCO <sub>2</sub> e)	Project emissions or actual net GHG removals by sinks (tCO <sub>2</sub> e)	Leakage (tCO <sub>2</sub> e)	GHG emission reductions or net GHG removals by sinks (tCO <sub>2</sub> e)		
				Amount achieved from 01 <sup>st</sup> September 2020 to 31 <sup>st</sup> December 2020	Amount achieved from 01 <sup>st</sup> January 2021 to 31 <sup>st</sup> August 2021	Amount achieved in the monitoring period
VPA - Spring Health – 1 (GS6513)	9,359	-	6	3,737	5,622	9,359

**E.3.4.5. Comparison of actual GHG emission reductions or net GHG removals by sinks with estimates in included VPA.**

<b>Means of verification</b>	Document Review
<b>Findings</b>	-
<b>Conclusion</b>	A comparison of the actual GHG emission reductions with the estimates in the included specific VPA is given in the below table. VVB confirmed that the baseline calculation used is found to be in line with registered VPA-DD/B03/, which is in cognizance with §17.4.12 GS VVS v1.0./B02/

Title and GS reference number of the VPA	Value estimated in ex-ante calculation in the included VPA-DD(s)	Actual values achieved by the VPAs during this monitoring period
VPA - Spring Health – 1 (GS6513)	9,995	9,359

**E.3.4.6. Remarks on difference from estimated value in included VPA.**

<b>Means of verification</b>	Document review
<b>Conclusion</b>	The actual emission reductions for VPA are less than the ex-ante estimated values in the VPA-DDs/B03/. No remark required.

### E.3.5. Assessment of reported sustainable development co-benefits.

<b>Means of verification</b>	Document Review, Interview
<b>Conclusion</b>	<p>The Verification team confirms that the data and parameters monitored related to sustainable development co-benefits are in compliance with the VPAs and the monitoring plan. A complete assessment of each of the monitored parameters has been provided in Appendix 6 of the verification report.</p> <p>VVB confirmed that the baseline calculation used is found to be in line with registered VPA-DD/B03/, which is in cognizance with §17.4.12 GS VVS v1.0/B02/</p>

### SECTION F. Internal quality control

>>

The final verification report passed a technical review. A technical reviewer qualified in accordance with the CCIPL's qualification scheme for CDM validation and verification has performed the technical review.

### SECTION G. Verification opinion

>>

Carbon Check (India) Private Ltd. has performed the third verification of the GS Programme of Activities" GS 5705 "Believe Green Safe Drinking Water PoA" (hereafter referred to as "Programme of Activities or PoA") for the VPA - Spring Health - 1GS6513

The verification team assigned by the VVB concludes that the PoA (Version 17, dated 13/05/2019), VPA GS6513 (VPA 1), as described in the VPA-DD and the Monitoring report (Version 11, dated 09/07/2023), meet all relevant GS4GG PoA requirement and registered VPA-DD requirement./B02/

### Verification methodology and process:

The Verification team confirms the contractual relationship signed on 08/08/2022 between the VVB, Carbon Check (India) Private Ltd., and SustainCert the entity authorised by Co-ordinating Managing Entity/ Project Participant, (Believe Greens). The team assigned to the verification meets the Carbon Check (India) Private Ltd.'s internal procedures including the GS requirements for the team composition and competence. The verification team has conducted a thorough contract review as per GS4GG and Carbon Check's procedures and requirements.

The verification is being performed as per the requirements described in the GS VVS v1.0/B02/, and GS4GG requirements and constitutes the review and completion of the following steps:

- Reviewing the PoA GS5705 (Version 17, dated 13/05/2019), the VPA for GS6513 (VPA 1)/B03/ to include the monitoring plan and the corresponding verification report.
- Previous verification and certification reports and the monitoring reports for the previous monitoring periods.
- Desk review of the validation report, MR, and other relevant documents including documents related to the project activities in emission reductions.
- Review of the applied monitoring methodology (Technologies and Practices to Displace Decentralized Thermal Energy Consumption Version 3.1 (TPDDTEC))/B01/.
- Resolution of CARs and CLs raised during verification.
- Issuance of Verification Report.

The voluntary project activities were correctly implemented according to the selected monitoring methodology, monitoring plan, and VPA/s. The monitoring system was installed, and maintained in a



proper manner, while collected monitoring data allowed for the verification of the amount of achieved GHG emission reductions. Through the review, the verification team confirms that the PoA has resulted in the GS6513 (VPA 1): 9,359 tCO<sub>2</sub>e of emission reductions for the period 01/09/2020 to 31/08/2021 (inclusive of both dates) during the first monitoring period for and achieved SDG benefits as detailed in Appendix 6 for the period.

Verified emission reductions:

Specific-case VPA reference number	Emission Reductions (tCO <sub>2</sub> e)
GS6513 (VPA 1)	9,359

Sustainable development contribution achieved during this monitoring period is shown in Appendix 6. CCIPL as a VVB is therefore pleased to issue a positive verification opinion in the attached Certification statement.

## SECTION H. Certification statement

>>

Carbon Check (India) Private Ltd., the VVB, has performed the verification of the GS Programme of Activities, GS 5705 “Believe Green Safe Drinking Water PoA” in Multiple countries. The PoA involves the distribution of safe water. The activity involves the distribution of safe water through local implementation partners (IP). The safe water being distributed under VPA are safer compared to the water earlier being drank by people in the baseline. By using spring health safe water, the PoA will save on the consumption of woody biomass and reduces GHG emissions.

The voluntary project activities of the Programme of Activities are designed to generate emission reductions by the distribution of safe water in Odisha, India. The CME and VPA implementer are responsible for the collection of data in accordance with the monitoring plan and reporting GHG emissions reductions from the voluntary project activity/ies. It is VVB’s responsibility to express an independent verification statement on the reported GHG emission reductions from the component project/s. The VVB does not express any opinion on the selected baseline scenario or on the validated and registered PoA-DD/VPA-DD/B03/. The verification is carried out in line with the GS VVS & requirements/B02/.

The verification was performed to identify the compliance of the component project with implementation and monitoring requirements, and to verify the actual amount of emission reductions achieved by the project, through obtaining evidence that included.

- i) Checking whether the provisions of the monitoring methodology and the monitoring plan were consistently and appropriately applied and
- ii) The collection of evidence supporting the reported data.

The verification is based on:

- PoA, (Version 17, dated 13/05/2019).
- GS6513 (VPA 1) are included in the PoA/B03/ and its monitoring plan for the monitoring period is from 01/09/2020 to 31/08/2021 (inclusive of both dates).
- Approved GS monitoring methodology Technologies and Practices to Displace Decentralized Thermal Energy Consumption Version 3.1 (TPDDTEC)/B01/
- Validation report for the PoA and the VPA.
- Monitoring report v13, dated 14/12/2023,

This statement covers the verification period GS6513 (VPA 1): 01/09/2020 to 31/08/2021 (inclusive of both dates).

The VVB had raised Zero (0) FAR, three (3) clarifications, and Fifteen (15) Corrective action requests which have been resolved by the CME.

The VVB considers it necessary to give reasonable assurance that reported GHG emission reductions were calculated correctly on the basis of the monitoring methodology and that the monitoring plan contained in the VPAs is fairly stated.

The VVB, hereby certifies that the project activity achieved emission reductions by sources of GHG equal to GS6513 (VPA 1): 9,359 tCO<sub>2</sub>e for the period 01/09/2020 to 31/08/2021 (inclusive of both dates), and achieved SDG benefits as detailed in Appendix 6 for the period GS6513 (VPA 1): 01/09/2020 to 31/08/2021 (inclusive of both dates) and all monitoring requirements have been fulfilled and is substantiated by an audit trail that contains evidence and records.

## Appendix 1. Abbreviations

Abbreviations	Full texts
AQL	Acceptable Quality Limit
CDM	Clean Development Mechanism
CAR	Corrective Action Request
CC IPL	Carbon Check (India) Private Ltd.
VER	Verified Emission Reduction
CL	Clarification Request
CME	Co-ordinating and Managing entity
VPA	Voluntary Project Activity
VPA-DD	Voluntary Project Activity Design Document
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
DR	Document review
DVR	Draft Verification Report
EB	CDM Executive Board
EF	Emission Factor
IR	Internal Resource
FA	Final Approval
FAR	Forward Action Request
FVR	Final verification Report
GHG	Greenhouse gas(es)
GS4GG	Gold Standard for the Global Goals
I	Interview
IPCC	Intergovernmental Panel on Climate Change
IR	Internal resource
MP	Monitoring Period
MR	Monitoring Report
PoA	Programme of Activities
PoA-DD	Programme of Activities Design Document
PP	Project Participant
QC/QA	Quality control /Quality assurance
SDG	Sustainable Development Goal
TA	Technical Area
TR	Technical Review
UQL	Unacceptable Quality Limit
VVS	Validation and Verification Standard
VVB	Validation & Verification Body

**Appendix 2. Competence of team members and technical reviewers**

**Carbon Check (India) Private Limited**
**Certificate of Competency**
**Mr. Harish Sharma**

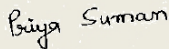
has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

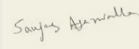
- |  |  |   |   |
|--|--|---|---|
| <input checked="" type="checkbox"/> Validator              | <input checked="" type="checkbox"/> Verifier           | <input checked="" type="checkbox"/> Team Leader             | <input checked="" type="checkbox"/> Technical Expert                        |
| <input type="checkbox"/> Technical Reviewer                | <input type="checkbox"/> Health Expert                 | <input type="checkbox"/> Gender Expert                      | <input type="checkbox"/> Plastic Waste Expert                               |
| <input type="checkbox"/> CCB Expert                        | <input type="checkbox"/> Legal Expert                  | <input checked="" type="checkbox"/> Financial Expert        | <input type="checkbox"/> Environmental, Health and Safety financial matters |
| <input checked="" type="checkbox"/> SDG+                   | <input checked="" type="checkbox"/> Social no-harm(S+) | <input checked="" type="checkbox"/> Environment no-harm(E+) |   |
| <input checked="" type="checkbox"/> Local Expert for India |  |   |   |

in the following Technical Areas:

- |  |  |                                  |   |                                  |
|--|--|----------------------------------|---|----------------------------------|
| <input checked="" type="checkbox"/> TA 1.1 | <input checked="" type="checkbox"/> TA 1.2 | <input type="checkbox"/> TA 2.1  | <input checked="" type="checkbox"/> TA 3.1  | <input type="checkbox"/> TA 4.1  |
| <input type="checkbox"/> TA 4. n           | <input type="checkbox"/> TA 5.1            | <input type="checkbox"/> TA 5.2  | <input type="checkbox"/> TA 7.1             | <input type="checkbox"/> TA 8.1  |
| <input type="checkbox"/> TA 9.1            | <input type="checkbox"/> TA 9.2            | <input type="checkbox"/> TA 10.1 | <input checked="" type="checkbox"/> TA 13.1 | <input type="checkbox"/> TA 13.2 |
| <input type="checkbox"/> TA 14.1           | <input type="checkbox"/> TA 15.1           | <input type="checkbox"/> TA 16.1 |   |                                  |

**Issue Date**
**5<sup>th</sup> December 2023**
**Expiry Date**
**31<sup>st</sup> December 2024**


**Ms. Priya Suman**  
Compliance Officer



**Mr. Sanjay Kumar Agarwalla**  
Technical Director

**Revision History of the document:**

Revision date	Summary of changes
2022	Initial Adoption
Jan 2023	Annual revision
Dec 2023	Change in the template due to revision in TA and function



## Carbon Check (India) Private Limited

### Certificate of Competency

**Ms. Indumathi C**

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC 14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

- |  |  |   |   |
|--|--|---|---|
| <input checked="" type="checkbox"/> Validator                            | <input checked="" type="checkbox"/> Verifier           | <input checked="" type="checkbox"/> Team Leader             | <input checked="" type="checkbox"/> Technical Expert                        |
| <input checked="" type="checkbox"/> Technical Reviewer                   | <input type="checkbox"/> Health Expert                 | <input type="checkbox"/> Gender Expert                      | <input checked="" type="checkbox"/> Plastic Waste Expert                    |
| <input type="checkbox"/> CCB Expert                                      | <input type="checkbox"/> Legal Expert                  | <input checked="" type="checkbox"/> Financial Expert        | <input type="checkbox"/> Environmental, Health and Safety financial matters |
| <input checked="" type="checkbox"/> SDG+                                 | <input checked="" type="checkbox"/> Social no-harm(S+) | <input checked="" type="checkbox"/> Environment no-harm(E+) |   |
| <input checked="" type="checkbox"/> Local Expert for India and Sri Lanka |  |   |   |

in the following Technical Areas:

- |  |  |                                  |   |   |
|--|--|----------------------------------|---|---|
| <input checked="" type="checkbox"/> TA 1.1 | <input checked="" type="checkbox"/> TA 1.2 | <input type="checkbox"/> TA 2.1  | <input checked="" type="checkbox"/> TA 3.1  | <input type="checkbox"/> TA 4.1             |
| <input type="checkbox"/> TA 4. n           | <input type="checkbox"/> TA 5.1            | <input type="checkbox"/> TA 5.2  | <input type="checkbox"/> TA 7.1             | <input type="checkbox"/> TA 8.1             |
| <input type="checkbox"/> TA 9.1            | <input type="checkbox"/> TA 9.2            | <input type="checkbox"/> TA 10.1 | <input checked="" type="checkbox"/> TA 13.1 | <input checked="" type="checkbox"/> TA 13.2 |
| <input type="checkbox"/> TA 14.1           | <input type="checkbox"/> TA 15.1           | <input type="checkbox"/> TA 16.1 |   |   |

Issue Date

5<sup>th</sup> December 2023

Expiry Date

31<sup>st</sup> December 2024

*Priya Suman*

**Ms. Priya Suman**  
Compliance Officer

*Sanjay Agarwalla*

**Mr. Sanjay Kumar Agarwalla**  
Technical Director

#### Revision History of the document:

Revision date	Summary of changes
2022 <sup>1</sup>	Annual revision
Jan 2023	Annual revision
Dec 2023	Change in the template due to revision in TA and function

CCIPL\_FM 7.9 Certificate of Competency\_V4.0\_112023

<sup>1</sup> Please refer to previous version of FM 7.9 for the revision history

**Appendix 3. Documents reviewed or referenced.**

No.	Author	Title	Provider
/1/	Believe greens	Monitoring report: 1. GS6513 - Spring Health_1 - Monitoring Report_V13A (Clean)_SD dated :14/12/2023	CME
/2/	Believe greens	ER sheet: Spring Health - ERC - V44 - (SH_1 - Verif 3 - R2)	CME
/3/	Believe greens	Annex A - Water Source Ownership Agreement - V_1	CME
/4/	Believe greens	Annex 7 - Water Quality Test	CME
/5/	Believe greens	Annex 9 - Survey questionnaire - Spring Health - Aug-2021	CME
/6/	Believe greens	Annex 5 - Baseline survey sample (20)	CME
/7/	Believe greens	Annex 10 - Survey - Training - (da Spouts, page 11)	CME
/8/	Believe greens	Annex 15 - GS 6513 Validation Appraisal Report - Spring Health_FINAL	CME

**Background documents**

Ref no.	Reference Document
/B01/	Technologies and Practices to Displace Decentralized Thermal Energy Consumption” Version 3.1, August 2017
/B02/	<ul style="list-style-type: none"> <li>a. GS4GG Principles &amp; Requirements (version 1.2)</li> <li>b. GS4GG Safeguarding principles &amp; requirements, version 1.2</li> <li>c. GS4GG Programme of activity requirements, version 1.2</li> <li>d. GS4GG Community services activity requirements, version 1.2</li> <li>e. GS4GG Validation and Verification standard for project activities, version 01.0</li> </ul>
/B03/	POA DD: GS5705_PoA-DD_13/05/2019_v17  VPA DD: GS6513_VPA-DD_02/07/2019_v16
/B04/	Standards: <ul style="list-style-type: none"> <li>a. Sampling and surveys for CDM project activities and programmes of activities CDM sampling standard, version 09.</li> <li>b. Guidelines for Sampling and Surveys for CDM Project activities and Programme of Activities Ver. 4.0.</li> </ul>
/B05/	IPCC 2006, volume 2, chapter 1
/B06/	IPCC Default emissions factor, EFDB Emission Factor Database.
/B07/	IPCC Default emissions factor: Non-CO <sub>2</sub> Emissions from Stationary Combustion.

/B08/	<p>Weblink:</p> <ol style="list-style-type: none"><li data-bbox="339 293 647 327">1. <a href="http://cdm.unfccc.int/">http://cdm.unfccc.int/</a></li><li data-bbox="339 327 748 360">2. <a href="https://www.goldstandard.org">https://www.goldstandard.org</a></li></ol>
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## Appendix 4. Clarification requests, corrective action requests and forward action requests

### 4.1 Clarifications (CLs)

Table 1: CLs

<b>CL ID</b>	01	<b>Section no.</b>	N/A	<b>Date:</b> 10/08/2022
<b>Description of CL</b>				
CME to clarify the reason for mentioning the version number of the Monitoring Report as V09.				
<b>Project participant response</b>				<b>Date:</b> 16/08/2022
The Monitoring Report V09 corresponds to the 1st submission. We include V10 here, containing the responses to Round 1.				
<b>Documentation provided by project participant</b>				
<i>Monitoring Report V10</i>				
<b>GS VVB assessment</b>				<b>Date:</b> 20/09/2022
The version 09 corresponds to the first submission. The response has been noted. CL Is closed.				

<b>CL ID</b>	02	<b>Section no.</b>	D.1. & D.2	<b>Date:</b> 10/08/2022
<b>Description of CL</b>				
Tables in Section D.1 and D.2 consists of red highlighted text. CME to clarify the use of red highlighted text for each parameter.				
<b>Project participant response</b>				<b>Date:</b> 16/08/2022
Red highlighted text is for Believe Green internal use only.				
<b>Documentation provided by project participant</b>				
<i>Monitoring Report V10</i>				
<b>GS VVB assessment</b>				<b>Date:</b> 20/09/2022
As in section D.1 and D.2, the nomenclature used for data/parameters is different from the GS certified design documents, which is not in line with the verification standard requirement. Hence, CL Is being converted into CAR. This CL is being closed here, and instead of closed CL, CAR 15 has been added at the last of the relevant section of the DVR.				

<b>CL ID</b>	03	<b>Section no.</b>	D.1.	<b>Date:</b> 10/08/2022
<b>Description of CL</b>				
The reason of changing the source of data and choice of data for the parameter "EFb,wood,CO2" is not clear to verification team. CME to clarify the same.				
<b>Project participant response</b>				<b>Date:</b> 16/08/2022
We have followed the requirements of the new methodology "GS-METHODOLOGY- Emission reductions from Safe Drinking Water Supply v.1.0" - Section 3.12.b (Parameter ID SDWS 9)				
<b>Documentation provided by project participant</b>				
<i>Monitoring Report V10</i>				
<b>GS VVB assessment</b>				<b>Date:</b> 20/09/2022
CME to update the source of data in accordance with certified DD.				
<b>Project participant response</b>				<b>Date:</b> 26/09/2022
We have modified Section D.1: "EFb, wood,CO2" ('Source of data used' & 'Choice of data or measurement methods and procedures')				
<b>Documentation provided by project participant</b>				
<i>Monitoring Report V11</i>				
<b>GS VVB assessment</b>				<b>Date:</b> 07/07/2023

CME has updated the source of data with the IPCC source which is in line with registered VPA-DD hence  
 CL is closed

#### 4.2. Corrective action required (CARs)

**Table 2 CARs**

CAR ID	01	Section no.	N/A	Date: 10/08/2022
<b>Description of CAR</b>				
In "Programme of activity information" table under key project information, GS ID of fully Validated CPA/VPA is to be mentioned in the last row DVR_Findings_CCIPL1368(GS6513)_Spring Health 10082022 (Reply)				
<b>Project participant response</b>				Date: 16/08/2022
We have added GS ID "Programme of activity information" in the last row.				
<b>Documentation provided by project participant</b>				
<i>Monitoring Report V10</i>				
<b>GS VVB assessment</b>				Date: 20/09/2022
The referred fully validated VPA GS 6315 is not traceable in GS registry. Moreover, the version number of certified POA DD is not consistent with GS registry database.				
<b>Project participant response</b>				Date: 26/09/2022
We have added VPA GS 6315 in las row of the "Programme of activity information" table.We have modified the version of PoA-DD				
<b>Documentation provided by project participant</b>				
<i>Monitoring Report V11.</i>				
<b>GS VVB assessment</b>				Date: 07/07/2023
CME has now updated the information for POA-DD which now in line with an registered VPA-DD and POA-DD hence. CAR is closed.				

CAR ID	02	Section no.	A.1	Date: 10/08/2022
<b>Description of CAR</b>				
Section A.1 of the MR refers to section 3.4.7 and Section (3.4.10.13) of "GS4GG Principles and Requirements" VVB has found that the section numbers have been quoted incorrectly. Moreover, CME to clearly mention the version of "GS4GG Principles and Requirements"				
<b>Project participant response</b>				Date: 16/08/2022
We have modified the Section A.1 of the Monitoring Report V10.				
<b>Documentation provided by project participant</b>				
<i>Monitoring Report V10.</i>				
<b>GS VVB assessment</b>				Date: 20/09/2022
References to "GS4GG Principles and Requirements" - version 1.2, have been updated. CAR closed.				

CAR ID	03	Section no.	A.2	Date: 10/08/2022
<b>Description of CAR</b>				
Map 1 of Section A.2 doesn't mark any location that PP wants to show. Moreover, Map 2 already underpinned the locations. CME to either mark the location in map 1 or remove the map.				
<b>Project participant response</b>				Date: 16/08/2022
We have removed Map 1 of Section A.2				
<b>Documentation provided by project participant</b>				
<i>Monitoring Report V10.</i>				
<b>GS VVB assessment</b>				Date: 20/09/2022
MR updated; CAR is closed.				

CAR ID	04	Section no.	A.3	Date: 10/08/2022
<b>Description of CAR</b>				
CME to mention the geographic boundary coordinates consisting of the project locations in a tabulated form using GPS coordinate system (e.g., WGS 84) deg, min, sec format.				

<b>Project participant response</b>	<b>Date:</b> 16/08/2022
In MR, Section A.2, we have added GPS coordinate system (WGS 84)	
<b>Documentation provided by project participant</b>	
<i>Monitoring Report V10.</i>	
<b>GS VVB assessment</b>	<b>Date:</b> 20/09/2022
The Geographical boundary demarcation to be mentioned in GPS coordinate system (e.g., WGS 84) deg, min, sec format. (e.g xx <sup>0</sup> yy' zz'')	
<b>Project participant response</b>	<b>Date:</b> 26/09/2022
In section A.2 we have adopted the format (XX <sup>0</sup> YY' ZZ'')	
<b>Documentation provided by project participant</b>	
<i>Monitoring Report V11</i>	
<b>GS VVB assessment</b>	<b>Date:</b> 07/07/2023
CME has now updated the section with geo coordinates in deg, min, sec format. (e.g xx <sup>0</sup> yy' zz'')	
<b>CAR is closed</b>	

<b>CAR ID</b>	05	<b>Section no.</b>	A.3	<b>Date:</b> 10/08/2022
<b>Description of CAR</b>				
In section A.3, update the name of methodology as per meth title.				
<b>Project participant response</b>				<b>Date:</b> 16/08/2022
In MR. V10, we have updated the name of methodology				
<b>Documentation provided by project participant</b>				
<i>Monitoring Report V10.</i>				
<b>GS VVB assessment</b>				<b>Date:</b> 20/09/2022
In section A.3, incorrect methodology has been referred. CME to update the correct methodology referring from certified PDD.				
<b>Project participant response</b>				<b>Date:</b> 26/09/2022
We have updated methodology title in section A.3				
<b>Documentation provided by project participant</b>				
<i>Monitoring Report V11</i>				
<b>GS VVB assessment</b>				<b>Date:</b> 07/07/2023
CME has now updated the section with the relevant methodology hence.				
<b>CAR is closed.</b>				

<b>CAR ID</b>	06	<b>Section no.</b>	B.1	<b>Date:</b> 10/08/2022
<b>Description of CAR</b>				
In section B.1 of the MR, It is mentioned that the location of the project is spread across around 100 villages within the state of Orissa in India, however, table 1 of the same section tabulates the information of around 200 villages. CME to correct the statement as per the actual scenario.				
<b>Project participant response</b>				<b>Date:</b> 16/08/2022
The Project serve 234 villages in the Orissa Region, us can be seen in the ERC spreadsheet.				
<b>Documentation provided by project participant</b>				
<i>ERC spreadsheet. ('Database' worksheet)</i>				
<b>GS VVB assessment</b>				<b>Date:</b> 20/09/2022
Section B.1 has been updated mentioning total 234 villages. CAR is closed.				

<b>CAR ID</b>	07	<b>Section no.</b>	B.2.3	<b>Date:</b> 10/08/2022
<b>Description of CAR</b>				
Section B.2.3. mentions a change in the start date of the crediting period. However, the details and or comparison of earlier vs current crediting period are missing. CME to transparently mention the earlier dates with justification for seeking change.				
<b>Project participant response</b>				<b>Date:</b> 16/08/2022

The start date of the crediting period was modified as required in the Verification Report "GS6513 Internal Verification II round\_20092019", Comment 2.

We have modified Sections A.1 and B.2.3 of the Monitoring Report V10.

**Documentation provided by project participant**

*Monitoring Report V10.*

**GS VVB assessment**

**Date:** 20/09/2022

The start date of crediting period mentioned in the "Verification Report "GS6513 Internal Verification II round\_20092019", Comment 2" is 01/09/2017, on the other hand the same is referred as 04/04/2017 in GS registry. CME to justify the contradiction.

**Project participant response**

**Date:** 26/09/2022

The start date of the crediting period was modified as required (and approved) in VPA - Spring Health-1 (GS 6513) – 1st MP – Round 3, below:

Sections	Clarifications and/or corrective action needed	Reasons for clarification and/or corrective action	Response by Project Representative
	the start date of crediting period shall be revised accordingly.		
	<p><u>GS 2nd Round Review</u></p> <p>The project is retroactive certification project, however the PD shall refer the rule (3.4.10.13) of the GS4GG PRINCIPLES AND REQUIREMENTS as per which:</p>	<p><b>PP 2nd Round Response</b></p>	<p>We have modified the crediting period: 01/09/17 to 31/08/19.</p> <p><b>GS Round 3</b> Request/comment is closed.</p>

**Documentation provided by project participant**

*Spring Health-1 (GS 6513) – 1st MP*

**GS VVB assessment**

**Date:** 07/07/2023

CME has given a clarification for the changed crediting period which was further checked and deemed to be appropriate as it was approved by GS in 1<sup>st</sup> monitoring period.

**CAR is closed**

<b>CAR ID</b>	08	<b>Section no.</b>	C	<b>Date:</b> 10/08/2022
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**Description of CAR**

In line with the Principle & Requirements -version 1.2, CME to demonstrate that no other similar technology or practices exist through which the potential arises for double counting or misestimation of impacts amongst projects.

**Project participant response**

**Date:** 16/08/2022

The Survey 'Aug\_2021', Graphic 4, show that no other similar technology or practices exist through which the potential arises for double counting or misestimation of impacts amongst projects.

(See ERC, 'Survey Aug\_2021' worksheet and MR, Section C.2)

We have modified MR V10, Section C.1

**Documentation provided by project participant**

- *Monitoring Report V10*
- *ERC spreadsheet*

**GS VVB assessment**

**Date:** 20/09/2022

The unique record of each unit is being maintained. The data is cross checked for any probable duplicacy, Hence, CAR is closed.

<b>CAR ID</b>	09	<b>Section no.</b>	D.1	<b>Date:</b> 10/08/2022
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**Description of CAR**

In section D.1 of the MR, CME to transparently mention that for the parameter Wb-wood, the option one i.e. default value has been applied referring the relevant guideline already quoted in the MR.

**Project participant response**

**Date:** 16/08/2022

For Woody Biomass we apply the default value: 0.4 kg/l As per GS-Rule Update - 'Application of TPDDTEC Methodology to Safe Water Supply Projects' - 03/05/2021, Section 2.1, Baseline Values, Option 1. We have modified MR V10, Section D.1	
<b>Documentation provided by project participant</b>	
<ul style="list-style-type: none"> <li>Monitoring Report V10</li> <li>ERC spreadsheet</li> </ul>	
<b>GS VVB assessment</b>	<b>Date:</b> 20/09/2022
The reference has been updated. CAR is close.	

<b>CAR ID</b>	10	<b>Section no.</b>	D.2	<b>Date:</b> 10/08/2022
<b>Description of CAR</b>				
The template of the tables provided in section D.2 of the MR is not consistent throughout. CME to update the tables as per the MR template.				
<b>Project participant response</b>				<b>Date:</b> 16/08/2022
Hemos actualizado las tablas de parámetros (Sections D.1 and D.2)				
<b>Documentation provided by project participant</b>				
Monitoring Report V10				
<b>GS VVB assessment</b>				<b>Date:</b> 20/09/2022
The have been updated and are consistent now, CAR Closed.				

<b>CAR ID</b>	11	<b>Section no.</b>	N/A	<b>Date:</b> 10/08/2022
<b>Description of CAR</b>				
"Verdana" font should be used throughout the MR.				
<b>Project participant response</b>				<b>Date:</b> 16/08/2022
We have used Verdana font throughout the MR				
<b>Documentation provided by project participant</b>				
Monitoring Report V10				
<b>GS VVB assessment</b>				<b>Date:</b> 20/09/2022
Font is consistent throughout. CAR closed.				

<b>CAR ID</b>	12	<b>Section no.</b>	N/A	<b>Date:</b> 10/08/2022
<b>Description of CAR</b>				
CME is to submit the data against				
<ul style="list-style-type: none"> <li>A. special codes 998 and 999 as per the provision of the survey.</li> <li>B. Repair and maintenance records of the purifiers.</li> <li>C. Monthly electricity bill (sample basis).</li> <li>D. Source of water and its ownership.</li> <li>E. Rights of ownership of the GHG reductions.</li> <li>F. Sample sales records (bills/receipts etc,) of purified water (period Sep-2020 to Aug-2021</li> </ul>				
<b>Project participant response</b>				<b>Date:</b> 16/08/2022
<ul style="list-style-type: none"> <li>A. We have cancelled codes 997, 998 and 999 in Appendix 3, because they are not applicable.</li> <li>B. In the MR we have added Appendix 7 - "Repair and maintenance records of the purifiers"</li> <li>C. Spring Health has no electricity bills as all of their machines are solar powered and therefore not powered by electricity.</li> <li>D. Spring Health has no show ownership of water</li> <li>E. Appendix 5 - Rights of ownership of the GHG reductions</li> <li>F. In the MR we have added Appendix 8 - "Monthly card "</li> </ul>				
<b>Documentation provided by project participant</b>				
<b>GS VVB assessment</b>				<b>Date:</b> 20/09/2022

- A. Ok, Accepted. CAR closed.  
 B. The sample record for the extension of warranty period provided in the MR. CAR Closed.  
 C. Ok, Accepted and CAR Closed.  
 D. **Source of water and ownership is still not justified. The CAR is open.**  
 E. CME has provisioned the ownership document as a sticker in every kiosk where water is sold to end customers, which explains that PP retains the rights of ownership of the GHG reductions. This notice is pasted on each kiosk for the information of all stakeholders. Hence, the CAR closed.  
 F. The records verified; CAR Closed.

<b>Project participant response</b>	<b>Date:</b> 26/09/2022
D. Spouts of Water take the water from the Taps and wells from the village	
<b>Documentation provided by project participant</b>	
ER Calculation	
<b>GS VVB assessment</b>	<b>Date:</b> 07/07/2023
From the given clarification it is not clear ownership of the water source, CME to clarify. <b>CAR is Open</b>	
<b>Project participant response</b>	<b>Date:</b> 12/09/2023
Annex A contains the agreement signed between the entrepreneur <b>Biswa Mohan Pattanaik</b> and <b>Spring Health</b> , where it mentions that <b>Biswa Mohan Pattanaik</b> has leased out the water source to <b>Spring Health</b> for a period of three years and would be renewed subsequently every three years.	
<b>Documentation provided by project participant</b>	
Monitoring Report V11A, Annex A.	
<b>GS VVB assessment</b>	<b>Date:</b> 20/10/2023
CME has now shared the water source ownership documents under annex A of MR which deemed to be appropriate. CAR is closed	

<b>CAR ID</b>	13	<b>Section no.</b>	N/A	<b>Date:</b> 10/08/2022
<b>Description of CAR</b>				
The sample record (annex 5) of the questionnaire shared against baseline survey data doesn't consist of any information on the survey variables, hence, a shared document is not acceptable. CME to provide the relevant sample records for further verification.				
<b>Project participant response</b>				<b>Date:</b> 16/08/2022
In the Annex 5 we have shown the following: <ul style="list-style-type: none"> <li>The questions in the samples match the worksheet 'Survey Aug_2021'</li> <li>The 20 sample customers are contained in the 'Survey Aug_2021' worksheet.</li> <li>The 'Survey Aug_2021' worksheet contained in the spreadsheet of the same name</li> </ul>				
<b>Documentation provided by project participant</b>				
annexAnnex 5 ER Calculations				
<b>GS VVB assessment</b>				<b>Date:</b> 20/09/2022
The survey questionnaire shared consists of design of all queries/questions for respondents. Furthermore, survey sheet has also been shared. CAR Closed.				

<b>CAR ID</b>	14	<b>Section no.</b>	N/A	<b>Date:</b> 10/08/2022
<b>Description of CAR</b>				
Sample sales records (bills/receipts etc.) of purified water (period Sep-2020 to Aug-2021).				
<b>Project participant response</b>				<b>Date:</b> 16/08/2022
(= CAR 12 F)				
<b>Documentation provided by project participant</b>				
<b>GS VVB assessment</b>				<b>Date:</b> 20/09/2022

Justified in CAR 12, Hence, CAR closed.

<b>CAR ID</b>	15	<b>Section no.</b>	N/A	<b>Date:</b> 20/09/2022
<b>Description of CAR</b>				
In sections D.1 and D.2, the taxonomy used for data/parameters are different from the GS certified design documents, which is not in line with the verification standard requirement.				
<b>Project participant response</b>				<b>Date:</b> 26/09/2022
We have removed the nomenclature used in section D.1 and D.2,				
<b>Documentation provided by project participant</b>				
<i>Monitoring Report V11</i>				
<b>GS VVB assessment</b>				<b>Date:</b> 07/07/2022
As clarified in CL2, the red highlighted text is for internal use which is not in line with the template filling guide, CME is requested to remove the nomenclatures used in red font. CAR is open				
<b>Project participant response</b>				<b>Date:</b> 12/09/2023
We have left the appropriate headings without the text for internal use visible.				
<b>Documentation provided by project participant</b>				
<i>Monitoring Report V11A</i>				
<b>GS VVB assessment</b>				<b>Date:</b> 20/10/2023
CME has now removed the nomenclatures used for internal purpose. Hence CAR is closed				

#### 4.3 Forward action request

>>

NA



## Appendix 5. Data and parameters fixed ex-ante

### SDG 13: Climate Action

Parameter	$EF_{b, wood, CO_2}$
Data unit:	tCO <sub>2</sub> /TJ
Default values used:	112
Purpose of data	To calculate VERs
Source and Verification of the source	IPCC Guidelines for National Greenhouse Gas Inventories, Volume 2, Energy, Chapter 2, Stationary Combustion, Table 2.5, Stationary Combustion, Table 2.5

Parameter	$EF_{b, wood, non\_CO_2}$
Data unit:	tCO <sub>2</sub> /TJ
Default values used:	9.20
Purpose of data	To calculate VERs
Source and Verification of the source	IPCC Fifth Assessment Report: Climate Change (IPCC AR5)

### SDG 12: Ensure sustainable consumption and production patterns.

Parameter	$W_{b-wood}$
Data unit:	Ton/liter
Default values used:	0.0004
Purpose of data	To calculate VERs
Source and Verification of the source	GS-Rule Update – ‘Application of TPDDTEC Methodology to Safe Water Supply Projects’ - 03/05/2021, Section 2.1, Baseline Values, Option 1

Parameter	$NCV_{b, wood}$
Data unit:	TJ/Ton
Default values used:	0.015
Purpose of data	To calculate VERs
Source and Verification of the source	(Registered VPA-DD) Definition of tCO <sub>2</sub> emission reductions and Tons of burnt wood avoided.

### SDG 6: Clean Water and Sanitation - Safe drinking water provided.

Parameter	$C_j$
Data unit:	Percentage
Default values used:	3.0%
Purpose of data	Baseline Definitions
Source and Verification of the source	Internal Survey Aug-2021

Parameter	Xboil
Data unit:	Percentage
Default values used:	1.8%
Purpose of data	Baseline definition
Source and Verification of the source	<ul style="list-style-type: none"> <li>Literature</li> <li>Internal Survey Aug-2021</li> </ul>

**Appendix 6. Data and parameters monitored.**

Relevant SDG Indicator	SDG 13, Climate action
Data/ Parameter	$F_{NRB, BL, Y}$
Unit	Percentage
Description	Non-renewability of woody biomass fuel during year y
Source of data	CDM-approved methodology AMS II. G
Value(s) applied	84.5%
Measurement methods and procedure	Calculated using the $f_{NRB}$ formula recommended by latest version of CDM- approved methodology AMS II.G The calculations are included in the Emission Reductions spreadsheet, sheet ' $f_{NRB} - Orissa$ '.
Monitoring frequency	Annual
QA/QC procedures	Data recording in accordance with the requirements of the QualityManagement System
Purpose of data	Calculation of emission reductions
Additional comment	N/A
VVB Assessment	VVB has assessed the "Spring Health - ERC - V44 - (SH_1 - Verif 3 - R2)" against $F_{NRB, BL, Y}$ , which was found in line with the values mentioned same has been cross checked by VVB, calculation method used to calculate the $F_{NRB, BL, Y}$ is correct in line with method given by AMS.II.G. v15.

Relevant SDG Indicator	SDG 13, Climate action
Data/ Parameter	$WATA_{CO_2}$ (Leakage)
Unit	tCO <sub>2</sub> / L (tons of CO <sub>2</sub> per litre of water)
Description	Leakage: Amount of CO <sub>2</sub> produced by the Maxi-WATA Electro Chlorinator
Source of data	ER sheet ' <i>Spring Health - ERC - V44 - (SH_1 - Verif 3 - R2)</i> '.
Value(s) applied	9.92E-09 tCO <sub>2</sub> /L
Measurement methods and procedure	To calculate the parameter, we used two sets of data. The first one comes from the technical specifications of the Maxi-Wata apparatus; specifically, the amount of electricity needed to produce one liter of chlorine, as well as the number of liters of water that can be purified with one liter of chlorine. The second sets of data are publicly available information on the amount of CO <sub>2</sub> emitted to produce electricity
Monitoring frequency	This quantity will be reassessed if and when the technology to produce the chlorine is changed, which could result in changes to the carbon emissions.
QA/QC procedures	Data recording in accordance with the requirements of the QualityManagement System
Purpose of data	Calculation of emission reductions
Additional comment	N/A
VVB Assessment	VVB has assessed the "Spring Health - ERC - V44 - (SH_1 - Verif 3 - R2)" against $WATA_{CO_2}$ (Leakage) which was found in line with the values mentioned same has been checked by VVB and confirmed that the values mentioned are correct and calculated in line with registered VPA-DD.

<b>Relevant SDG Indicator</b>	<b>SDG 13, Climate action</b>			
<b>Data/ Parameter</b>	Rickshaws (Leakage)			
<b>Unit</b>	tCO <sub>2</sub> / L (tons of CO <sub>2</sub> per litre of water)			
<b>Description</b>	Leakage: Amount of CO <sub>2</sub> emitted by the transportation by rickshaws of the purified water to customers' homes			
<b>Source of data</b>	To calculate the parameter we used two sets of data. The first is the CO <sub>2</sub> emissions per km of the auto rickshaws used for transportation. The second is the number of km traveled for each liter of water delivered. This is calculated from the average number of km travelled to deliver the average number of jerry cans.			
<b>Value(s) applied</b>	4.0E-07 tCO <sub>2</sub> /L			
<b>Measurement methods and procedure</b>	<b>Variable</b>			
	<b>Value</b>			
	<b>Units</b>			
	<b>Source</b>			
	Emissions factor (gCO <sub>2</sub> /km):	60	gCO <sub>2</sub> /km	Calculated
	Emissions factor (tCO <sub>2</sub> /km):	0.00006	tCO <sub>2</sub> /km	
	Fuel: Diesel			
	Number of Jerry cans	90	10L/trip	Field data: 90 is the average
Number of Litres	900	L/trip	Calculated	
Average distance	6	km/trip	Field data.	
Average distance per L	0.007	km/L	Calculated	
Emissions per litre distributed	4E-07	tCO <sub>2</sub> /L	Calculated	
<b>Monitoring frequency</b>	This quantity will be reassessed if and when the technology to produce the chlorine is changed, which could result in changes to the carbon emissions.			
<b>QA/QC procedures</b>	Data recording in accordance with the requirements of the Quality Management System.			
<b>Purpose of data</b>	Calculation of emission reductions			
<b>Additional comment</b>	<a href="https://www.google.com/search?q=consumption+rickshaws&amp;tbm=isch&amp;source=iu&amp;ictx=1&amp;fir=hYBDGob3A51C8M%253A%252CK3INZ411jJ5ttM%252C_%26vet=1&amp;usq=AI4_kRqFNZqasIrgG8_jaeUn3Tc40eKHQ&amp;sa=X&amp;ved=2ahUKEwj_uNOAxtPkAhWlHrkGHAMHBTkQ9QEwAXoECAYQCQ#imgrec=dleabCsEKFzssM:&amp;vet=1">https://www.google.com/search?q=consumption+rickshaws&amp;tbm=isch&amp;source=iu&amp;ictx=1&amp;fir=hYBDGob3A51C8M%253A%252CK3INZ411jJ5ttM%252C_%26vet=1&amp;usq=AI4_kRqFNZqasIrgG8_jaeUn3Tc40eKHQ&amp;sa=X&amp;ved=2ahUKEwj_uNOAxtPkAhWlHrkGHAMHBTkQ9QEwAXoECAYQCQ#imgrec=dleabCsEKFzssM:&amp;vet=1</a>			
<b>VVB Assessment</b>	VVB has assessed the "Spring Health - ERC - V44 - (SH_1 - Verif 3 - R2)" against <b>Rickshaws (Leakage)</b> which was found in line with the values mentioned same has been checked by VVB and confirmed that the values mentioned are correct and calculated in line with registered VPA-DD.			

<b>Relevant SDG Indicator</b>	<b>SDG 13, Climate action</b>
<b>Data/ Parameter</b>	Emission Reductions per litre
<b>Unit</b>	tCO <sub>2</sub> e/L

<b>Description</b>	Emission Reductions per litre
<b>Source of data</b>	'Spring Health - ERC' spreadsheet, Emission Reduction worksheet.
<b>Value(s) applied</b>	0.000623
<b>Measurement methods and procedure</b>	Excel sheet
<b>Monitoring frequency</b>	Annually
<b>QA/QC procedures</b>	Data recording in accordance with the requirements of the Quality Management System.
<b>Purpose of data</b>	Calculation of emission reductions
<b>Additional comment</b>	N.A.
<b>VVB Assessment</b>	VVB has assessed the "Spring Health - ERC - V44 - (SH_1 - Verif 3 - R2)" against "Emission Reductions per litre" which was found in line with the values mentioned same has been checked by VVB and confirmed that the values mentioned are correct and calculated in line with registered VPA-DD

<b>Relevant SDG Indicator</b>	<b>SDG 6</b> , 'Clean Water and Sanitation - Safe drinking water provide'
<b>Data/ Parameter</b>	Up <sub>y</sub>
<b>Unit</b>	Fraction
<b>Description</b>	Cumulative usage rate for technologies in project scenario p during year y, based on cumulative installation rate and drop off rate (Up,y)
<b>Measured/calculated/default</b>	In this project, end users purchase clean water from Spring Health in jerry cans, which they then use at home over the next few days. Once the water runs out, they can purchase another jerry can. For the purposes of this certification, we only count each jerry can sold. If customers decide to stop buying Spring Health water, then no additional water sales are added to our database. For this reason, for the water purchased we use a drop off rate of Up,y = 1.
<b>Source of data</b>	Data obtained internally by Spring Health
<b>Value(s) of monitored parameter</b>	1
<b>Monitoring equipment</b>	N/A
<b>Measuring/reading/recording frequency</b>	Annual
<b>Calculation method (if applicable)</b>	usage survey report
<b>QA/QC procedures</b>	Analysis performs and data recording in accordance with the requirements of the Quality Management System.
<b>Purpose of data</b>	Definition of TCo2 emissions reductions
<b>Additional comments</b>	N/A
<b>VVB Assessment</b>	VVB has assessed the "Annual survey (Jan-2020) we found/The source of this data is Annual Survey Aug-2021" against "Up <sub>y</sub> " which was found in line with the values calculated same has been checked by VVB and confirmed that the values mentioned are correct.

<b>Relevant SDG Indicator</b>	<b>SDG 6, 'Clean Water and Sanitation - Safe drinking water provide'</b>
<b>Data/ Parameter</b>	<b>nj</b>
<b>Unit</b>	Number of persons
<b>Description</b>	Number of persons per household
<b>Source of data</b>	In our baseline survey (Jan-2020) we found. The source of this data is our Internal Survey Aug-2021.
<b>Value(s) applied</b>	<b>3.615 persons/HH</b>
<b>Measurement methods and procedure</b>	Measured
<b>Monitoring frequency</b>	Annual
<b>QA/QC procedures</b>	Data recording in accordance with the requirements of the QualityManagement System
<b>Purpose of data</b>	Definition of proportion of population using safely managed drinking waters
<b>Additional comment</b>	N/A
<b>VVB Assessment</b>	VVB has assessed the "In our baseline survey (Jan-2020) we found/The source of this data is our Internal Survey Aug-2021" against "nj" which was found in line with the values calculated same has been checked by VVB and confirmed that the values mentioned are correct.

<b>Relevant SDG Indicator</b>	<b>SDG 6, 'Clean Water and Sanitation - Safe drinking water provide'</b>																
<b>Data/ Parameter</b>	<b>N<sub>p,y</sub></b>																
<b>Unit</b>	Number of Persons.day																
<b>Description</b>	Number of persons.day consuming water supplied by project scenario p																
<b>Source of data</b>	Internal Survey Aug-2021																
<b>Value(s) applied</b>	10,812 persons Day																
<b>Measurement methods and procedure</b>	<table border="1" data-bbox="603 1357 1329 1574"> <thead> <tr> <th><i>Parameter</i></th> <th><i>Variable</i></th> <th><i>Value</i></th> <th><i>Unit</i></th> </tr> </thead> <tbody> <tr> <td>Number of Liters sold</td> <td>QPW</td> <td>15,784,890</td> <td>L</td> </tr> <tr> <td>Quantity litres per person</td> <td>QP</td> <td>4.0</td> <td>L /Person</td> </tr> <tr> <td colspan="4">Number of Persons. Day = <math>Q_{PW}/(QP*365) = 11,532</math></td> </tr> </tbody> </table> <p>(see 'SDG 06 - (SH_3y)' worksheet)</p>	<i>Parameter</i>	<i>Variable</i>	<i>Value</i>	<i>Unit</i>	Number of Liters sold	QPW	15,784,890	L	Quantity litres per person	QP	4.0	L /Person	Number of Persons. Day = $Q_{PW}/(QP*365) = 11,532$			
<i>Parameter</i>	<i>Variable</i>	<i>Value</i>	<i>Unit</i>														
Number of Liters sold	QPW	15,784,890	L														
Quantity litres per person	QP	4.0	L /Person														
Number of Persons. Day = $Q_{PW}/(QP*365) = 11,532$																	
<b>Monitoring frequency</b>	Annual																
<b>QA/QC procedures</b>	The data is analyzed in the monitoring report and raw data of the Monitoring surveys is made available for review.																
<b>Purpose of data</b>	Calculation of the parameter "Proportion of households perceiving less often smoke levels, incidence of coughing, incidence of respiratory illness, incidence of itchy eyes"																
<b>Additional comment</b>	N.A.																
<b>VVB Assessment</b>	VVB has assessed the "Internal Survey Aug-2021" against "N <sub>p,y</sub> " which was found in line with the values calculated same has been checked by VVB and confirmed that the values mentioned are correct.																

<b>Relevant SDG Indicator</b>	<b>SDG 6, 'Clean Water and Sanitation - Safe drinking water provide'</b>
<b>Data/ Parameter</b>	Water Quality (a) (Chlorine content – carried by accredited labs)
<b>Unit</b>	Chlorine concentration (mg/L)
<b>Description</b>	Chlorine is used to kill all pathogens, including e.coli. By ensuring that the chlorine concentration is within the limits described in section Water Quality Testing, we are ensuring that water is safe to drink (this is confirmed by more detailed water tests by accredited laboratories which show the absence of e.coli and other coliforms, see box below).
<b>Source of data</b>	Measurements are made regularly internally by Spring Health employees. See Appendix 2 for more details
<b>Value(s) applied</b>	1mg/L
<b>Measurement methods and procedure</b>	Measured
<b>Monitoring frequency</b>	Water quality is monitored continuously to ensure that chlorine content is within the range recommended by the World Health Organization <sup>7</sup> . Agents visit all the kiosks on a regular basis to test the water quality and its
<b>QA/QC procedures</b>	Analysis perform and data recording in accordance with the requirements of the Quality Management System.
<b>Purpose of data</b>	to ensure that chlorine content is within the range recommended by the World Health Organization
<b>Additional comment</b>	N/A
<b>VVB Assessment</b>	VVB has assessed the "Appendix 2" against "Water Quality (a) (Chlorine content – carried by accredited labs)" which was found in line with the values mentioned in the supporting document same has been checked by VVB and confirmed that the values mentioned are correct.

<b>Relevant SDG Indicator</b>	<b>SDG 6, 'Clean Water and Sanitation - Safe drinking water provide'</b>																																				
<b>Data/ Parameter</b>	Water Quality (b) (carried by and accredited, ISO certified lab <sup>8</sup> )																																				
<b>Unit</b>	The test measures concentrations of several levels of pollutants. The table below is a screenshot from one example water test. In particular, it shows the units used for each pollutant. <table border="1" data-bbox="614 1534 1364 1870"> <thead> <tr> <th colspan="4">TEST RESULT</th> </tr> <tr> <th>Sr. No.</th> <th>Test Parameters</th> <th>Standard Methods</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>pH</td> <td>APHA 22<sup>nd</sup> Edition 4500 H+(A+B)</td> <td>6.62</td> </tr> <tr> <td>2</td> <td>Fluoride (as F)</td> <td>APHA 22<sup>nd</sup> Edition 4500 F-(D)</td> <td>0.005 mg/L</td> </tr> <tr> <td>3</td> <td>Iron (as Fe)</td> <td>APHA 22<sup>nd</sup> Edition 3500 Fe (B)</td> <td>Absent</td> </tr> <tr> <td>4</td> <td>Nitrate- Nitrogen (as NO<sub>3</sub>)</td> <td>APHA 22<sup>nd</sup> Edition 4500 N-(B)</td> <td>0.52 mg/L</td> </tr> <tr> <td>5</td> <td>Sulphate (as SO<sub>4</sub>)</td> <td>APHA 22<sup>nd</sup> Edition 4500-SO<sub>4</sub> (C+D+E)</td> <td>Absent</td> </tr> <tr> <td>6</td> <td>Total Colonies</td> <td>APHA 22<sup>nd</sup> Edition</td> <td>Absent</td> </tr> <tr> <td>7</td> <td>Total Coliform (MPN Technique)</td> <td>APHA 22<sup>nd</sup> Edition</td> <td>Absent</td> </tr> </tbody> </table>	TEST RESULT				Sr. No.	Test Parameters	Standard Methods	Result	1	pH	APHA 22 <sup>nd</sup> Edition 4500 H+(A+B)	6.62	2	Fluoride (as F)	APHA 22 <sup>nd</sup> Edition 4500 F-(D)	0.005 mg/L	3	Iron (as Fe)	APHA 22 <sup>nd</sup> Edition 3500 Fe (B)	Absent	4	Nitrate- Nitrogen (as NO <sub>3</sub> )	APHA 22 <sup>nd</sup> Edition 4500 N-(B)	0.52 mg/L	5	Sulphate (as SO <sub>4</sub> )	APHA 22 <sup>nd</sup> Edition 4500-SO <sub>4</sub> (C+D+E)	Absent	6	Total Colonies	APHA 22 <sup>nd</sup> Edition	Absent	7	Total Coliform (MPN Technique)	APHA 22 <sup>nd</sup> Edition	Absent
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3	Iron (as Fe)	APHA 22 <sup>nd</sup> Edition 3500 Fe (B)	Absent																																		
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6	Total Colonies	APHA 22 <sup>nd</sup> Edition	Absent																																		
7	Total Coliform (MPN Technique)	APHA 22 <sup>nd</sup> Edition	Absent																																		
<b>Description</b>	As per Methodology: once every two years by accredited labs																																				
<b>Source of data</b>	The laboratory receives water samples from each village																																				
<b>Value(s) applied</b>	Value applied: Absent (i.e. absence of e.coli and other coliforms). In all the tests carried out, it has been found that total colonies of e.coli and total coliform were absent. This was expected from the application of																																				

<b>Measurement methods and procedure</b>	The list of workshops carried out for women during the corresponding monitoring period
<b>Monitoring frequency</b>	Twice a year in every village (this is four times more frequently than the requirement by the Methodology, i.e. once every two years by accredited labs).
<b>QA/QC procedures</b>	Analysis performed and data recording in accordance with the requirements of the Quality Management System.
<b>Purpose of data</b>	Ensure that concentrations of various levels of pollutants remain at permitted levels
<b>Additional comment</b>	The results comply with the TPDDTEC methodology, Section A.3.3 (E).
<b>VVB Assessment</b>	VVB has assessed the "Water quality reports" against the "Water Quality (b) (carried by and accredited, ISO certified lab <sup>8</sup> )" which was found in line with requirement set out by methodology and VPA-DD.

<b>Relevant SDG Indicator</b>	<b>SDG 6</b> , 'Clean Water and Sanitation - Safe drinking water provide'
<b>Data/ Parameter</b>	QPWy
<b>Unit</b>	Liters
<b>Description</b>	Number of liters of purified water sold by Spring Health across the villages included in the present project activity
<b>Source of data</b>	The data collected by the sales team at the point of sale.
<b>Value(s) applied</b>	15,784,890 Liters
<b>Measurement methods and procedure</b>	Calculated
<b>Monitoring frequency</b>	Continuously. The data is gathered continuously as water is sold in the various kiosks
<b>QA/QC procedures</b>	Data recording in accordance with the requirements of the Quality Management System.
<b>Purpose of data</b>	Water consumption calculation
<b>Additional comment</b>	N/A
<b>VVB Assessment</b>	VVB has assessed the "The data collected by the sales team at the point of sale" against "QPWy" which was found in line with the values calculated same has been checked by VVB during on-site interviews and database confirmed that the values mentioned are correct.

<b>Relevant SDG Indicator</b>	<b>SDG 6</b> , 'Clean Water and Sanitation - Safe drinking water provide'
<b>Data/ Parameter</b>	<b>PSW</b>
<b>Unit</b>	%
<b>Description</b>	Proportion of population using safely managed drinking water services
<b>Source of data</b>	Survey
<b>Value(s) applied</b>	2.3 %
<b>Measurement methods and procedure</b>	$PSW = \text{Number of customers} / \text{Total household} =$ $= 2,991 / 137,323 = 2.3 \%$ (See 'SDG 6 (SH-4y)' worksheet)
<b>Monitoring frequency</b>	Annual



<b>QA/QC procedures</b>	Development of surveys and data recording in accordance with the requirements of the Quality Management System
<b>Purpose of data</b>	Water consumption calculation
<b>Additional comment</b>	The calculation methods have been changed with respect to the last monitoring period
<b>VVB Assessment</b>	VVB has assessed the <i>survey result</i> against the “PSW” which was found in line with the values mentioned in the supporting document also same has been checked by VVB and confirmed values calculated in line with registered VPA-DD mentioned are correct.

### Safeguarding Principles Assessment (SPA) Monitoring

#### >> Not Applicable

No safeguarding principles were added to the Monitoring plan by CME.

### Sustainable Development Contributions Achieved

Sustainable Development Goals Targeted	Goals	SDG Impact	Amount Achieved	Units/ Products
			Amount achieved from 01 <sup>st</sup> September 2019 to 31 <sup>st</sup> August 2020	
SDG 13: Climate Action		Emissions Reductions	9,359	VERs
SDG12: sustainable consumption and production	Ensure and	Quantity of wood fuel burned avoided	5,367	Ton
SDG 6. Clean Water and Sanitation		Proportion of population using safely managed drinking water services	2.3	Percentage

Furthermore, as per report of CME and from on-site interviews conducted by VVB, it was confirmed that no disputes, inputs, and comments has received via the Continuous Input and Grievance Mechanism during this monitoring period.



## APPENDIX 8: Gold Standard Verification Protocol

CC IPL's Checklist question	Ref.	MoV <sup>9</sup>	Findings, comments, references, data sources	Draft conclusion	Final conclusion
<b>1. Sustainability Monitoring</b>					
1.1 Have all non-neutral indicators been monitored as per the sustainability monitoring plan?	-	DR,	Yes, all the non-neutral indicators have been monitored as per the sustainability monitoring plan.	OK	OK
1.2 Have the methods to monitor data changed? And are they suitable to the project scale and type?	-	DR	Methods to monitor data have not changed as compared with the monitoring plan in the registered passport and monitoring plan.	OK	OK
1.3 Has the way of monitoring been followed? With the inclusion of dates and parameters?	-	I, DR	The sustainability monitoring plan has been followed as described in the Passport.	OK	OK
1.4 Have mitigation measures been put in place to prevent the risk of the violation of the safeguarding principle of the "Do No Harm" assessment or to neutralize a Sustainable Development Indicator that is being monitored?	-	I, DR	The POA is the distribution of safe water to the masses and doesn't involve any large set up or organization base that can be qualified as significant for a "Do Not Harm" procedures.	OK	OK
1.5 Has all the data in the Sustainability development matrix been verified and cross-checked against available sources of project data? Has it been described how sustainable development would be affected if a variance occurred?	-	I, DR	Yes, all data in the sustainability development matrix have been verified and cross-checked from the supporting documents/data and during the on-site audit.	OK	OK
<b>2. Other</b>	-				
2.1 Are there any issues from the previous validation/verification? (ie FARs, requests / approvals for RMP)	-	DR	No	OK	OK

<sup>9</sup> MoV = Means of Verification, DR = Document Review, I = Interview, www = internet search.

CC IPL's Checklist question	Ref.	MoV <sup>9</sup>	Findings, comments, references, data sources	Draft conclusion	Final conclusion
2.2 Has the project ever received any requests for reviews or incompletes from the GS or GS Secretariat?	-	DR	No there are no requests for reviews or incomplete for the project.	OK	OK
2.3 The evaluation of the status of mitigation and compensation measures has been verified.	-	DR	Yes, the status of mitigation and compensation measures has been verified.	OK	OK