


## GOLD STANDARD VERIFICATION AND CERTIFICATION REPORT

### BASIC INFORMATION

<b>Title and GS reference number of the project activity</b>	Aqua Clara Water Filtration Program in Kenya GS Reference: 1078
<b>Version number of the verification and certification report</b>	1.0 TN P-No. : 8003007915 - 19/068
<b>Completion date of the verification and certification report</b>	08/08/2019
<b>Monitoring period number and duration of this monitoring period</b>	MP: 5 19/02/2018-18/02/2019 (Included both days)
<b>Version number of the monitoring report to which this report applies</b>	3.0
<b>Crediting period of the project activity corresponding to this monitoring period</b>	Fixed Crediting Period 28/12/2011 to 27/12/2021
<b>Project participants</b>	Aqua Clara Foundation
<b>Host Party</b>	Republic of Kenya
<b>Applied methodologies and standardized baselines</b>	Technologies and Practices to Displace Decentralized Thermal Energy Consumption – 11/04/2011 <b>Standardized baselines: N/A</b>
<b>Mandatory sectoral scopes linked to the applied methodologies</b>	3: Energy Demand
<b>Certified amount of GHG emission reductions or GHG removals for this monitoring period</b>	<b>43,431 tCO<sub>2</sub>e</b>
<b>Name of the VVB</b>	TÜV NORD CERT GmbH
<b>Name, position and signature of the approver of the verification and certification report</b>	Stefan Winter  Final Approver

## SECTION A. Executive summary

Aqua Clara Foundation has commissioned the TÜV NORD JI/CDM Certification Program to carry out the Gold Standard (GS) 5th periodic verification of the project:

### “Aqua Clara Water Filtration Program in Kenya”

with regard to the relevant requirements for GSF GS4GG project activities.

This verification covers the period from 19/02/2018 to 18/02/2019 (including both days).

The project activity was registered on 26/12/2013 and registration ID 1078 with a retroactive fixed crediting period starting 28/12/2011.

This report summarizes the findings of the verification of the project, performed on the basis of Gold Standard GS4GG requirements, relevant guidelines in the gold standard for the global goals, as well as criteria given to provide for consistent project operations, monitoring and reporting.

Verification is the periodic independent review and ex-post determination by the GS-VVB of the monitored reductions in GHG emissions and the project’s sustainability during the verification period.

The objective of Gold Standard verification is to verify the reported emission reductions and SDGs and to confirm that actual monitoring systems and procedures are in compliance with that described in the monitoring plan and the additional requirements stated by the GS.

The voluntary program reduces GHG emissions through implementation of the ACF Bio Sand Filter (BSF) and the point-of-use Hollow Fiber Filters (HFF). The point-of-use hollow fiber filters could be the Household Hollow Fiber Filter (HHFF) or the Institutional/Commercial Hollow Fiber Filter (IHFF).

These ACF water purifiers displace the use of firewood fuel traditionally used to boil water for domestic consumption and in the alternative offer an affordable, long-term solution for households that typically boil water or consume raw water from turbid sources, in rural and peri-urban Kenya. In addition, the project activity will reduce the health risks of indoor air pollution.

Details of the project location are given in table A-1 below:

**Table A-1: Project Location**

No.	Project Location
Host Country	The Republic of Kenya
Region:	23 Counties of Kenya
Project location	Nairobi, Nandi, Uasin Gishu, Kisii, Nyamira, Nakuru, Murang’a, Bomet, Homa Bay, Migori, Kisumu, Siaya, Busia, Nyeri, Kirinyaga, Embu, Kericho, Elgeyo Marakwet, Kakamega, Bungoma, Trans Nzoia, Machakos, and Makueni,
Host country coordinates	
Latitude:	0°1'24.8" S
Longitude:	37°54'22.3" E

**Table - A-2: Technical data of the project activity**

Parameter	Unit	Value
Manufacturer	-	Aqua Clara Foundation
BSF	Litres/day	36
HHFF	Litres/day	15-100
IHFF	Litres/day	100-400

During the onsite verification, it was confirmed that the actual implementation of the project is in line with the project technical description in the registered PDD. And the project complies with all relevant statutory requirements.

It is verified that during this monitoring period, the project has operated normally and there have been no situations that occurred which may impact the applicability of the applied GS methodology. The monitoring system was installed, maintained in a proper manner, while collected monitoring data allowed for the verification of the amount of achieved GHG emission reductions.

## SECTION B. Verification team, technical reviewer and approver

### B.1. Verification team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)	Involvement in			
						Desk review	On-site inspection	Interview(s)	Verification findings
1.	Team Member	EI	Lubanga	David	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### B.2. Technical reviewer and approver of the verification and certification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)
1.	Observer Technical reviewer	EI	Zhao	Xuejiao	TÜV NORD China
2.	Technical reviewer /Approver	IR	Winter	Stefan	TÜV NORD CERT GmbH

## SECTION C. Means of verification

### C.1. Desk/document review

During the desk review all documents initially provided by the client and publicly available documents relevant for the verification were reviewed. The main documents are listed below:

- the last revision of the PDD including the monitoring plan<sup>/PDD/</sup>,
- Gold Standard for the Global Goals Transition Annex\_v1.0
- the GS monitoring report for this monitoring period, including the claimed emission reductions for the project<sup>/MR/</sup>,
- the documentation of previous GS verifications<sup>/VER/</sup>
- the emission reduction calculation spreadsheet<sup>/ER/</sup>.
- the installation databases<sup>/XLS/</sup>.

Other supporting documents, such as publicly available information on the GS website and background information were also reviewed.

### C.2. On-site inspection

Duration of on-site inspection: 17/06/2019 - 21/06/2019				
No.	Activity performed on-site	Site location	Date	Team member
1.	Opening meeting	Aqua Clara Office - Kisii	17/06/2019	David Lubanga
2	Visit Households, Institutions and Commercial entities using ACI technologies and participated in the Surveys	Bomet County	18/06/2019	
3	Visit Households, Institutions and Commercial entities using ACI technologies and participated in the Surveys	Kisii County, Migori County	19/06/2019	
4	Visit Households, Institutions and Commercial entities using ACI technologies and participated in the Surveys	Nyamira County	20/06/2019	
5.	Closing Meeting - Onsite findings & discussions - ER Calculations - SDG Indicators - Setting of timelines	Aqua Clara Office, Kisii County	21/06/2019	

### C.3. Interviews

No.	Interviewee			Date	Subject	Team member	
	Last name	First name	Affiliation				
1.	Sally	Gakii	ClimateCare/ Project Manager	17/06/2019	- Implementati on - Surveys - ER calculations	David Lubanga	
2.	Makori	Dominic	Aqua Clara Kenya/Produ ction		- Production - Warranties		
3.	Moindi	Peter	Aqua Clara Kenya/M&E <sup>1</sup>		- Monitoring		
4.	Nyakundi	Daniel	Aqua Clara Kenya/Produ ction Department		- Production		
5.	Oburi	Jane	Aqua Clara Kenya/M&E		- Monitoring		
6.	Andanje	Brian	H <sub>2</sub> OPE/Acce lerator Manager		- Implementati on		
7.	Orare	Josephine	Aqua Clara Kenya/M&E		- Monitoring		
8.	Nyamwaya	Betty	Aqua Clara Kenya/Opera tions Manager		- Monitoring - Testing		
10.	Chebet	Beatrice	PHO		- Monitoring		
11.	Nyakenanda	Naomy	Aqua Clara Kenya/Enum erator		- Training - Timing of test and surveys - Procedures - Challenges - Compensatio n		
12.	Mayaka	Damaris	University/En umerator		- Training - Timing of test and surveys - Procedures - Challenges - Compensatio n		
13.	Mombinya	Wycliffe	University/En umerator		- Training - Timing of test and surveys - Procedures - Challenges - Compensatio n		
14.					-		

#### C.4. Sampling approach

##### C.4.1 Sampling during monitoring

<sup>1</sup> Monitoring and Evaluation

<input type="checkbox"/>	No sampling approach has been used by the PP to determine the monitored parameters				
<input checked="" type="checkbox"/>	A sampling approach has been taken for the following monitored parameter(s):				
	Parameter	Sampling approach <sup>1)</sup>	Sampling Type <sup>2)</sup>	Population	Sample Size
	$U_{p,y}$ (BSF)	SiRS	PS	2,938	310
	$U_{p,y}$ (HHFF)	SiRS	PS	1,419	185
	$U_{p,y}$ (IHFF)	SiRS	PS	98	94

<sup>1)</sup> Sampling Approaches:

SiRS: Simple Random Sampling  
 StRS: Stratified Random Sampling  
 SS: Systematic Sampling  
 CS: Cluster Sampling  
 MSS: Multi-stage Sampling

<sup>2)</sup> Sampling Types:

PS: Parameter Sampling

## Sampling Plan

### Sampling Objectives:

To accurately quantify the water consumption characteristics in the project scenario, usage rate of the project technologies distributed to households, and sustainable development impacts.

In line with the approved PDD, the PP shall execute Usage surveys, SD assessments and other non-field surveys for the same sampling units.

### Target population:

Users of the ACI project technologies.

### Sampling Method:

Simple random sampling from the database (total sales record)<sup>2</sup>.

### Sample Size:

Targeted: BSF (557), HHFF (185), and IHFF (94)  
 Reached: BSF (310), HHFF (249), and IHFF (94)

### Desired Precision:

This sample size meets the 90/10 rule and the prescribed minimum requirements of the applied GS methodology and PDD.

### Sampling Frame:

Only users of project technologies, drawn from the TSR for each age group.

### Usage Surveys (US)

The US determines a usage parameter to account for drop off rates as project technologies age and are replaced. The parameter is measured annually.

<sup>2</sup> Procedure for picking the random samples has been outlined in the MR, and is consistent with the PDD

## US Sampling Approach

- BSF and HHFF samples were differentiated by regions as some regions represented a higher weight
- For BSF and HHFF, the PP chose oversampling for each age group to account for any absences and non-responses.
- The PP ensured that at least 30 samples for BSF and HHFF were selected for each age being surveyed.
- PP chose to sample all users of IHFF. However, only 94 out of 98 could be reached
- The calculation of the sample size for the monitoring surveys for the BSF units is based upon a 0.7 COV under a 90/10 approach assumed in the PDD and allowed by the applied GS methodology

## Leakage Assessment

The CME has carried out leakage assessment in accordance with provisions of the PDD. Leakage risk remains low and hence the value of zero is correct.

### C.4.2 Sampling approaches during verification

<input type="checkbox"/>	No sampling approach has been used by the VT to verify the monitored parameters				
<input checked="" type="checkbox"/>	A sampling approach has been applied by the VT for the following monitored parameter(s):				
	Parameter	Sampling approach <sup>1)</sup>	Sampling Type <sup>2)</sup>	Population	Sample Size
	$U_{p,y}$ (BSF)	SiRS	AS	310	12
	$U_{p,y}$ (HHFF)	SiRS	AS	185	13
	$U_{p,y}$ (IHFF)	SiRS	AS	94	6

#### <sup>1)</sup> Sampling Approaches:

- SiRS: Simple Random Sampling  
 StRS: Stratified Random Sampling  
 SS: Systematic Sampling  
 CS: Cluster Sampling  
 MSS: Multi-stage Sampling

#### <sup>2)</sup> Sampling Types:

- AS: Acceptance Sampling  
 PS: Parameter Sampling  
 COM: Full data check at higher data aggregation levels and sampling at original data levels

## 1) Verifier's Action

### Acceptance sampling

A site visit by the VVB is required each time verification is carried out. The verification team has carried out an onsite visit as part of the verification and certification process of the project activity.

The following were the main objectives: -

- An assessment of the implementation and operation of the proposed GS project activity as per the registered PDD;
- A review of information flows for generating, aggregating and reporting the monitoring parameters;

- Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the approved monitoring plan;
- A cross-check between information provided in the monitoring report and data from other sources such as plant log books, inventories, purchase records or similar data sources;
- A check of the monitoring equipment, including calibration performance and observations of monitoring practices against the requirements of the PDD and the selected methodology;
- A review of calculations and assumptions made in determining the GHG data and emission reductions;
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.
- Verifiers procedure for Simple random sampling of onsite records & acceptance sampling

Furthermore, and for determining the accuracy of data transfer from hard copies to the TSR, the verifier checked 20 random records and compared the same with respective TSR for all the three project technologies. The records checked as demonstrated in the table below:

Unit and Unique ID			
	BSF	HHFF	IHFF
1.	B17-142	HF15P-874	HF100-211
2.	B17-110	HF15P-1075	HF100-212
3.	B17-032	HF15P-1186	HF15P-1923
4.	B17-135	HF15P-1226	HF100-210
5.	B17-008	HF15P-1010	HF15P-2350
6.	B15-298	HF15P-1904	HF15P-2351
7.	B15-333	HF15P-2024	HF15P-1654
8.	B15-275	HF15P-2014	
9.	B15-257	HF15P-2068	
10.	B15-058	HF15P-1965	
11.	B15-231	HF15P-1151	
12.	B15-170	HF15P-1121	
13	B15-099		

Results:

- For the BSF, we discovered that B17-032, B15-231 and B15-170 were not entered into the database
- For the HHFF, no major discrepancies were noted, but for some dates before December 2018, the columns N and O dates should match but did not match due to wrong formatting (see CAR 08)
- For the IHFF, we noted that HF15P-2350 and HF15P-2350 had wrong dates beyond the MP and in the future

For determining the authenticity of the reported usage rate during the monitoring period ( $U_{P,y}$ ) reported for this monitoring period in the monitoring reports, the verifier determined that acceptance sampling was the most ideal and practical approach. The VVB sampling frame is the 310 households, 185 institutions and 94 institutions/commercial entities that participated in the monitoring survey.

Applying the excel randomizer; a sample would be drawn from the PP's own sample used in the three different technologies. Based on the guidelines of the Standard - Sampling and surveys for CDM project activities and programmes of activities, version 7.0, an AQL of 1% and UQL of 20%, with 10% producer risk and 5% consumer risk was conservatively selected. Therefore, a sample size of 22 was arrived at, with 1 as the acceptance number. However, a sample size of 31 was selected to allow for possible attrition. The sample was also checked to ensure that all vintages are adequately represented. All the 30 end-users were successfully visited.

The results confirmed that indeed the users drawn from PP's sample frames were part of the monitoring studies, and the estimated per cent working operational units is not materially different from VVB on-site findings, and thus, deemed correct.

## Verifier's Sampling table

Unit and Unique ID			
	BSF	HHFF	IHFF
1.	B17-027	HF15P-1924	HF100-072
2.	B17-110	HF15P-2379	HF100-123
3.	KE2-071	KS-030	HF100-212
4.	PB-103	HF15P-012	HF100-193
5.	B15-351	HF15P-774	HF100-185
6.	KE4-061	HF15P-351	
7.	B17-138	HF15P-1654	
8.	B2-133	HF15P-2191	
9.	B17-045	HF15P-1832	
10.	B17-043	HF15P-1863	
11.	B17-130	HF15P-1641	
12.	KB2-003	HF15P-1813	
13		HF15P-1261	

The verification team can confirm that all 30 units visited were found to be in normal operation. The unique ID of the 31<sup>st</sup> unit for Role Modern Hotel could not be read well therefore it is excluded here. However, Sosera Secondary school was found to have two units, of type HHFF and IHFF. But the IHFF was broken down and only one was working in the main office (HF15P-012). Therefore, the reported usage rates for all units for this monitoring period could be confirmed.

From the defined processes and procedures including the sampling plan in the MR, the verification team has determined that the report provides sufficient information without errors or omissions and commissions that would warrant a revision of the same.

### Conclusion

For the parameters determined ex-post through sampling, the VT can confirm that the surveys were conducted in line with the registered monitoring plan in the PDD and the Gold Standard for the Global Goals Transition Annex. The sampling efforts were undertaken in accordance with the "Standard: Sampling and surveys for CDM project activities and programme of activities" version 7.0, and the GS "Guidelines for carrying out usage surveys for projects implementing household water filtration technologies", so that the presented results are confirmed with a reasonable level of confidence.

### C.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Description of project activity	1	2	0
Fixed parameters	1	0	0
GHG Monitoring Parameters	4	4	0
Calculation of Emission Reductions	1	1	0
Sustainable Data and parameters monitored	0	0	0
Management	0	0	0
Grievance Mechanism/Continues Inputs	0	0	0
QA/QC	0	0	2
Editorials	0	1	0
Others (specify) - ER Comparisons	1	0	0
<b>Total</b>	<b>8</b>	<b>8</b>	<b>2</b>

## SECTION D. Verification findings

### D.1. Compliance of the monitoring report with the monitoring report form

<b>Means of verification</b>	<p>By means of the GS website it has been checked whether the latest applicable MR template has been used.</p> <p>Further it has been checked whether the latest instructions for filling out the MR template have been followed. Every section has been checked against the respective guidance.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> <li>• /MR/</li> <li>• /MRT/</li> <li>• /gs/</li> </ul>						
<b>Findings</b>	<table border="1" style="width: 100%;"> <tr> <td style="width: 5%; text-align: center;"><input checked="" type="checkbox"/></td> <td>The latest reporting template has been applied.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>The latest instructions for filling out the MR have been followed. No adverse finding has been identified in the course of this verification.</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context: - CAR 03</td> </tr> </table>	<input checked="" type="checkbox"/>	The latest reporting template has been applied.	<input type="checkbox"/>	The latest instructions for filling out the MR have been followed. No adverse finding has been identified in the course of this verification.	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context: - CAR 03
<input checked="" type="checkbox"/>	The latest reporting template has been applied.						
<input type="checkbox"/>	The latest instructions for filling out the MR have been followed. No adverse finding has been identified in the course of this verification.						
<input checked="" type="checkbox"/>	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context: - CAR 03						
<b>Conclusion</b>	<table border="1" style="width: 100%;"> <tr> <td style="width: 5%; text-align: center;"><input type="checkbox"/></td> <td>No CARs / CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>The raised CARs / CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.</td> </tr> </table> <p>The verification team has checked all sections of the MR and confirms by means of comparing the MR that has been used with the standardized GS4GG MR version 1.0 template.</p> <p>It could be confirmed the latest instructions for filling out the MR have been followed.</p>	<input type="checkbox"/>	No CARs / CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.	<input checked="" type="checkbox"/>	The raised CARs / CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.		
<input type="checkbox"/>	No CARs / CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.						
<input checked="" type="checkbox"/>	The raised CARs / CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.						

### D.2. Description of project activity

<b>Means of verification</b>	<p>This voluntary program comprises promotion and sale of ACF water purification technologies to households (BSF and HHFF), institutional and commercial entities (IHFF) within the host country Kenya. These ACF water purifiers displace the use of non-renewable wood fuel traditionally used to boil water for domestic consumption and in the alternative offer an affordable, long-term solution for households that typically boil water or consume raw water from turbid sources, in rural and peri-urban Kenya. In addition to GHG emission reductions, the project activity will reduce the health risks of indoor air pollution.</p> <p>The following are the implementation milestones.</p> <ul style="list-style-type: none"> <li>- 26/12/2013: Registration</li> <li>- 28/12/2011: Start date of fixed crediting period</li> <li>- 16/06/2016: Design Change approved</li> <li>- 09/07/2018: Transition to GS4GG approved by the GS</li> <li>- 27/12/2021: End of crediting period</li> </ul> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> <li>• /MR/</li> <li>• /VER/</li> <li>• /PDD/</li> <li>• /PHT/</li> <li>• /XLS/</li> </ul>
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	<ul style="list-style-type: none"> <li>• /HCR/</li> </ul>
<b>Findings</b>	<input type="checkbox"/> No adverse finding has been identified in the course of this verification.
	<input checked="" type="checkbox"/> The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context:
	- CL 01, CAR 03
<b>Conclusion</b>	<input type="checkbox"/> No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/> The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	It can be confirmed that the Monitoring report is complete and transparent and in accordance with the latest approved PDD, transition Annex, and other relevant requirements as well as with the applicable monitoring report form. The project is implemented as described.

### D.3. Compliance of monitoring activities with the registered monitoring plan

#### D.3.1. Data and parameters fixed ex ante or at renewal of crediting period

<b>Means of verification</b>	The verification team has checked the ex-ante parameters and data stated in Section D.1 of MR and compared with section B.6.3 of the registered PDD whether all parameters fixed ex-ante for the crediting period have been applied correctly.				
	The following list of ex-ante fixed parameters have been applied:				
	<b>Nbr.</b>	<b>Parameter abbreviation</b>	<b>Description</b>	<b>Value</b>	<b>Unit</b>
	1	C <sub>j</sub>	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	18 - Households 76 – Institutions/ commercial entities	%
	2	EF <sub>b,fuel,CO2</sub>	CO2 emission factor of the wood fuel	112	tCO <sub>2</sub> /TJ
	3	EF <sub>b,fuel,CH4</sub>	CH4 emission factor of the wood fuel	0.03	tCO <sub>2</sub> /TJ
	4	EF <sub>b,fuel,N2O</sub>	CO <sub>2</sub> emission factor of the wood fuel	0.004	tCO <sub>2</sub> /TJ
	5	W <sub>b,y</sub>	Quantity of fuel in tonnes required to treat 1 litre of water using technologies representative of baseline scenario b	0.00054960 - Households 0.00054458 - Institutions/commercial entities	Tonnes/litre
	6	NCV <sub>b</sub>	Net calorific value of wood fuel used in the baseline	0.015	TJ/tonne
	7	GWP	Global Warming Potential of CH <sub>4</sub>	25	tCO <sub>2</sub> e/tCH <sub>4</sub>
8	GWP	Global Warming Potential of N <sub>2</sub> O	298	tCO <sub>2</sub> e/tN <sub>2</sub> O	
	The following sources of information have been used in this context:				
	<ul style="list-style-type: none"> <li>• /MR/</li> <li>• /ER/</li> </ul>				

		<ul style="list-style-type: none"> <li>• /PDD/</li> <li>• /gs/</li> </ul>
<b>Findings</b>	<input checked="" type="checkbox"/>	The MR and the ER calculation have considered the parameters fixed ex-ante for the crediting period correctly, no deviations have been observed.
	<input type="checkbox"/>	The following deviations from the parameters fixed ex-ante or at renewal of crediting period have been identified in the course of this verification: N/A
	<input checked="" type="checkbox"/>	In this context the following CARs, CLs, FARs have been raised: CL 06
<b>Conclusion</b>	<input type="checkbox"/>	No CARs / CLs / FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs / CLs / FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	The data and parameters listed in the section D.1 of MR was cross checked with the applied methodology, registered PDD, ER and are found to be consistent.	

### D.3.2. Data and parameters monitored

<b>Means of verification</b>	During the verification all monitoring parameters listed in Section D.2 of MR were compared with section B.7.1 of the registered PDD have been verified with regard to the:		
	<ul style="list-style-type: none"> <li>(i) appropriateness of the applied measurement / determination method,</li> <li>(ii) the correctness of the values applied for ER calculation,</li> <li>(iii) the accuracy, and applied QA/QC measures.</li> </ul>		
	<b>Parameter</b>	<b>Description</b>	<b>Frequency</b>
	<b>Monitoring Method</b>		
$U_{p,y}$	This is the usage rate. At least 30 samples for each age group were represented.	Annually	Usage Rate Surveys Were done together with sustainable development indicators.  <b>Verified values (%)</b> - BSF: 90.65 - HHFF: 85.41 - IHFF: 64.89  <b>VVB Assessment</b> See sampling details in section C.4  Reference: /XLS/
$N_{p,y}$	Number of persons consuming water supplied by project scenario expressed in person years. This is the product of the average number of persons in a HH/institution or served in a commercial entity, multiplied by the total days of operation in a year	Biennially	Water consumption field test (WCFT)  <b>Verified values (person.days)</b> - BSF: 2,843 - HHFF: 2,059 - IHFF: Calculated for each unit  <b>VVB Assessment</b> Verified and approved at MP4  Reference: /XLS//HCR/
Number of filters sold	This is sourced from the total sales record (TSR)	Annually	The databases for the three different filters are

				<p>continuously populated with sales.</p> <p><b>Verified values</b></p> <ul style="list-style-type: none"> <li>- BSF: 2,938</li> <li>- HHFF: 1,419</li> <li>- IHFF: 98</li> </ul> <p><b>VVB Assessment</b> The VVB team checked 20 sample records in the TSRs against hard copy receipts and conducted an onsite visit. See details in section C.4.2</p>
	Quality of Treated Water	Quality of filtered water	Annually	<p>Monitoring Survey – Water Quality Tests</p> <p><b>Verified values (%)</b></p> <ul style="list-style-type: none"> <li>- BSF: 99.29</li> <li>- HHFF: 100</li> <li>- IHFF: 100</li> </ul> <p><b>VVB Assessment</b> The water quality tests were conducted using 3M Petrifilm Plate instructions by trained personnel. Water samples were collected from raw water and water filtered using the project technologies to determine E.coli levels in both water samples. The VVB team interviewed the staff hired and trained to conduct the tests to determine their knowledge level and competencies. It was noted that the training and protocol was consistent with the 3M manual<sup>3M/</sup>.</p> <p>Reference: /ER/</p>
	Q <sub>p,y</sub>	Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day	Biennially	<p>Water consumption field test (WCFT)</p> <p><b>Verified values (litres/person/day)</b></p> <ul style="list-style-type: none"> <li>- BSF: 6.56</li> <li>- HHFF: 5.53</li> <li>- IHFF: 0.87</li> </ul> <p><b>VVB Assessment</b> Verified and approved at MP4</p>
	Q <sub>p,cleanboil,y</sub>	Quantity of safe (treated, or from safe supply) water boiled in the project scenario p, after installation of project technology	Biennially	<p>Water consumption field test (WCFT)</p> <p><b>Verified values (litres/person/day)</b></p> <ul style="list-style-type: none"> <li>- BSF: 0</li> <li>- HHFF: 0</li> <li>- IHFF: 0</li> </ul> <p><b>VVB Assessment</b></p>

			Verified and approved at MP4
$Q_{p,rawboil,y}$	Quantity of raw water boiled in the project scenario p per person per day	Biennially	Water consumption field test (WCFT)  <b>Verified values</b> (litres/person/day) - BSF: 0 - HHFF: 0 - IHFF: 0  <b>VVB Assessment</b> Verified and approved at MP4
Volume of safe water consumed in the project scenario	Same as $Q_{p,y}$ above. Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day	Biennially	Water consumption field test (WCFT)  <b>Verified values</b> (litres/person/day) - BSF: 0 - HHFF: 0 - IHFF: 0  <b>VVB Assessment</b> Verified and approved at MP4
$B_{b,y}$	Quantity of wood fuel consumed in baseline scenario b during the year y in tons	Annually	The parameter is calculated from the equation $(1 - C_j) * N_{j,y} * W_{j,y} * (Q_{j,y} + Q_{j,rawboil,y})$  <b>Verified values (tons)</b> BSF: 8.39 HHFF: 5.124 IHFF: 0.0001142  <b>VVB Assessment</b> Calculated values from other fixed and monitored parameters  Reference: /XLS//ER/
Reduction in water borne diseases such as skin rash, diarrhoea, foot sores, parasites, eye problems and other water borne diseases.	Number of persons who have experienced a decrease of water borne diseases such as skin rash, diarrhoea, foot sores, parasites, eye problems and other water borne diseases since using the filter	Annually	Monitoring survey  Open-ended questionnaire to determine overall improvement in health and incidents of water borne diseases. Results have been presented from monitoring surveys conducted during this monitoring period.  <b>Verified values (%)</b> - BSF: 77 - HHFF: 83 - IHFF: 57  <b>VVB Assessment</b> The reported values in MR have been checked and are consistent with the survey results  Reference: /XLS/
Air Quality	Measurement of user perceptions between the	Annually	Monitoring Survey

		<p>baseline and project scenario: smoke levels, incidence of coughing, incidence of respiratory illness, and incidence of itchy eyes.</p>		<p>Open-ended questionnaire to determine overall improvement in health and incidents of water borne diseases. Results have been presented from monitoring surveys conducted during this monitoring period.</p> <p><b>Verified values (%)</b></p> <ul style="list-style-type: none"> <li>- BSF Reduced Smoke levels in the House: 81 Reduced Incidents of Coughing: 80 Reduced incidences of Itchy Eyes: 79</li> <li>- HHFF Reduced Smoke levels in the House: 76.8 Reduced Incidents of Coughing: 79 Reduced incidences of Itchy Eyes: 78</li> <li>- IHFF Reduced Smoke levels in the House: 35.1 Reduced Incidents of Coughing: 39 Reduced incidences of Itchy Eyes: 39</li> </ul> <p><b>VVB Assessment</b> The reported values in MR have been checked and are consistent with the survey results</p> <p>Reference: /XLS/</p>
	<p>Number of people attending training/ workshops on maintenance of the water filters, water and sanitation management.</p>	<p>This parameter will be collected to demonstrate that the project provides training and workshops on filter assembly, installation, use and maintenance</p>	<p>Annually</p>	<p>Training records</p> <p>Training records include signed attendance lists and subject matter</p> <p>VVB Assessment The VVB team has checked for evidence of trainings</p> <p><b>Verified values:</b></p> <p>107 in 8 trainings</p> <p><b>VVB Assessment</b> The reported values indicated in D.2 of the MR have been checked and are consistent with the provided evidences for the monitoring period</p>

				Reference: /TR/ Employment and wages Records
	Employment wages of people employed by the project	Number of men and women employed by the project	Annually	<b>Verified values:</b> <ul style="list-style-type: none"> <li>- Permanent staff: 14</li> <li>- Sales Agents: 41</li> <li>- Temporary Staff: 19</li> </ul> <b>VVB Assessment:</b> <p>The values could be confirmed from employment records and interviews with staff at the Aqua Clara Offices. Out of the 14 permanent staff, 4 are women and their wages compare favourably with men and way above the country's minimum wage laws. Out of the 19 sales agents, 12 are women and their wages are similar to men</p>
	Records of income generated by entrepreneurs enrolled in the project activity distribution programme	Number of men and women employed by the project	Annually	Reference: /EMP/ Employment and wages Records <b>Verified values:</b> <ul style="list-style-type: none"> <li>- Permanent staff: 14</li> <li>- Sales Agents: 41</li> <li>- Temporary Staff: 19</li> </ul> <b>VVB Assessment:</b> <p>The values could be confirmed from employment records and interviews with staff at the Aqua Clara Offices. Out of the 14 permanent staff, 4 are women and their wages compare favourably with men and way above the country's minimum wage laws. Out of the 19 sales agents, 12 are women and their wages are similar to men</p>
	Number of people employed by the project	Annually	Reference: /EMP/ Employment Records <b>Verified values:</b> <ul style="list-style-type: none"> <li>- Permanent staff: 14</li> <li>- Sales Agents: 41</li> <li>- Temporary Staff: 19</li> </ul> <b>VVB Assessment:</b> <p>The values could be confirmed from employment records and interviews with staff at the</p>	
	Number of people employed by the project	Annually	Reference: /EMP/ Employment Records <b>Verified values:</b> <ul style="list-style-type: none"> <li>- Permanent staff: 14</li> <li>- Sales Agents: 41</li> <li>- Temporary Staff: 19</li> </ul> <b>VVB Assessment:</b> <p>The values could be confirmed from employment records and interviews with staff at the</p>	

				<p>Aqua Clara Offices. Out of the 14 permanent staff, 4 are women and their wages compare favourably with men and way above the country's minimum wage laws. Out of the 19 sales agents, 12 are women and their wages are similar to men</p> <p>Reference: /EMP/</p>
	Number of people attending training/workshops on water filters.	This parameter will be collected to demonstrate that the project provides training and workshops on filter use and water storage	Annually	<p>Training Records</p> <p>Training/workshop records include signed attendance lists and subject matter</p> <p>VVB Assessment The VVB team has checked for evidence of trainings</p> <p><b>Verified value: 27</b> Household Water treatment and Safe Storage Workshop – 15 participants (24-25 October 2018, in Kisii county)</p> <p>Household Water treatment and Safe Storage Workshop – 12 participants (27-28 February 2019, in Bomet county)</p> <p><b>VVB Assessment</b> The reported number of attendees in D.2 of the MR have been checked and are consistent with the provided evidences for the monitoring period</p> <p>Reference: /TR/</p>
	Number of workshops, seminars organized, and training-related opportunities held. Certificates/training manuals	This parameter will be collected to demonstrate that the project provides training and workshops on filter assembly, installation, and use	Annually	<p>Training records</p> <p>Training records include signed attendance lists and subject matter</p> <p>VVB Assessment The VVB team has checked for evidence of trainings</p> <p><b>Verified value:</b></p> <p>8 trainings</p> <p><b>VVB Assessment</b> The reported value indicated in D.2 of the MR has been checked and is consistent with the provided evidences for the monitoring period.</p>

				Each training list with signed participants has been furnished to the VVB. Reference: /TR/
	LE <sub>p,y</sub>	Leakage in project scenario p during year y	Biennially	Leakage assessment is carried out as per guidelines of the registered PDD  <b>VVB Assessment</b> Verified and approved at MP4
<b>Findings</b>	CL 01, CL 02, CL 03, CL 04, CL 05, CL 07, CAR 04, CAR 05, CAR 06, CAR 07			
<b>Conclusion</b>	<input type="checkbox"/>	No CARs / CLs / FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.		
	<input checked="" type="checkbox"/>	The raised CARs / CLs / FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.		
	<p>During the verification all relevant monitoring parameters (as listed in chapter B.7.1 of the revised PDD) have been verified with regard to the appropriateness of the applied measurement / determination method, the correctness of the values applied for ER calculation, the accuracy, and applied QA/QC measures. The results as well as the verification procedure are described parameter-wise in the project specific verification checklist.</p> <p>After appropriate corrections were carried out by the project participant it can be confirmed that all monitoring parameters have been measured / determined without material misstatements and in line with all applicable standards and relevant requirements.</p>			

### D.3.3. Implementation of sampling plan

<b>Means of verification</b>	<p>The verification team has checked whether the PP has applied a sampling approach to determine the monitored values.</p> <p>Further it has been checked whether the PP has correctly applied the implemented sampling plan including</p> <ul style="list-style-type: none"> <li>(i) description of the implemented sampling design</li> <li>(ii) collected data</li> <li>(iii) analysis of collected data</li> <li>(iv) demonstration on whether the required confidence/precision has been met.</li> </ul> <p>The following sources of information have been used in this context.</p> <ul style="list-style-type: none"> <li>• /MR/</li> <li>• /ER/</li> <li>• /PDD/</li> <li>• /XLS/</li> </ul>		
<b>Findings</b>	<input type="checkbox"/>	The PPs have not applied sampling approaches for the parameters monitored.	
	<input checked="" type="checkbox"/>	The PPs have applied sampling approaches for the following parameters monitored.	
		1.	Parameter: Name:

			total sales record.	
			Description on how the sampling efforts and survey comply with the validated sampling plan:	See section C.4
		2.	Parameter:	
		Name:		
			Description on how the sampling efforts and survey comply with the validated sampling plan:	
	<input checked="" type="checkbox"/>	In this context the following CARs, CLs, FARs have been raised:		
		CL 01, CAR 07		
<b>Conclusion</b>	<input type="checkbox"/>	No CARs / CLs / FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.		
	<input checked="" type="checkbox"/>	The raised CARs / CLs / FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.		
		After all corrections were addressed, the VVB can confirm that sampling was correctly applied to determine the monitored parameters.		

#### D.4. Assessment of data and calculation of emission reductions or net removals

##### D.4.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

<b>Means of verification</b>	<p>During the verification the calculation of baseline GHG emissions has been checked. In detail the following has been verified:</p> <ul style="list-style-type: none"> <li>• <i>Transparency</i>: It has been checked whether the calculation of baseline emissions is fully traceable and, where used, the Excel calculation provides all calculation formulae.</li> <li>• <i>Parameter consistency</i>: It has been checked whether all internal and external parameters and data used for the calculation are applied consistently in the monitoring report and the calculation spreadsheet.</li> <li>• <i>Correctness</i>: It has been checked whether the applied formulae and methods for calculating baseline emissions are in accordance with the monitoring plan and the approved methodology.</li> <li>• <i>Completeness</i>: It has been checked whether all calculations are complete and without omissions.</li> </ul> <p>The equation applied for the determination of baseline GHG emissions is consistent with the registered PDD and methodology:</p> <p><b>Baseline Emissions</b>  Baseline Emissions are calculated as follows:  <math display="block">BE_{b,y} = B_{b,y} * (f_{NRB,b,y} * EF_{b,fuel,CO2} + EF_{b,fuel,nonCO2}) * NCV_{b,fuel}</math> Where :  <math>BE_y</math> = Baseline Emissions in year y  <math>B_{b,y}</math> = Quantity of fuel consumed in baseline scenario b during the year y in tons  <math>f_{NRB,b,y}</math> = Fraction of biomass used in year y for project scenario b that can be established as non-renewable biomass  <math>EF_{b,fuel,CO2}</math> = CO<sub>2</sub> emission factor of the fuel that is substituted or reduced  <math>EF_{b,fuel,nonCO2}</math> = Non-CO<sub>2</sub> emission factor of the fuel that is substituted or reduced  <math>NCV_{b,fuel}</math> = Net calorific value of the fuel that is substituted or reduced</p> <p>The general equation for the calculation of <math>B_{b,y}</math> is as follows : -</p> $B_{b,y} = (1 - C_j) * N_{j,y} * W_{i,y} * (Q_{j,y} + Q_{j,rawboil,y})$
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Where:

$N_{b,y}$ : 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 who in the baseline are already consuming safe water without boiling it

$B_{b,y}$ : Quantity of fuel consumed in baseline scenario b during the year y in tons

$Q_{p,y}$ : Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day

$Q_{p,raw,boil,y}$ : Quantity of raw water boiled in the project scenario p per person per day

$W_{b,y}$ : 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.

#### Baseline Emissions for BSF Filters:

Vintage Year 2018:

$$BE_y = B_{b,y} * (f_{NRB,b,y} * EF_{b,fuel,CO2}) + (EF_{b,fuel,CH4} + EF_{b,fuel,N2O}) * NCV_{b,fuel}$$

$$B_{b,y} = (1 - C_j) * N_{i,y} * W_{i,y} * (Q_{j,y} + Q_{j,rawboil,y})$$

$$B_{b,y} = (1-0.18) * 2,843 * 0.0005496 * (6.56+0) = 8.396 \text{ tonnes}$$

$$BE_y = 8.396 \text{ tonnes} (0.92 * 112 \text{ tCO}_2/\text{TJ}) + (0.75 \text{ t}_{CH4}/\text{TJ} + 1.192 \text{ t}_{N20}/\text{TJ}) * 0.015 \text{ TJ/tonne}$$

$$= 13.2229 \text{ tCO}_2\text{e (per filter, per year)}$$

Vintage Year 2019:

$$BE_y = B_{b,y} * (f_{NRB,b,y} * EF_{b,fuel,CO2}) + (EF_{b,fuel,CH4} + EF_{b,fuel,N2O}) * NCV_{b,fuel}$$

$$B_{b,y} = (1 - C_j) * N_{i,y} * W_{i,y} * (Q_{j,y} + Q_{j,rawboil,y})$$

$$B_{b,y} = (1-0.18) * 2,843 * 0.0005496 * (6.56+0) = 8.396 \text{ tonnes}$$

$$BE_y = 8.396 \text{ tonnes} (0.92 * 112 \text{ tCO}_2/\text{TJ}) + (0.75 \text{ t}_{CH4}/\text{TJ} + 1.192 \text{ t}_{N20}/\text{TJ}) * 0.015 \text{ TJ/tonne}$$

$$= 13.2229 \text{ tCO}_2\text{e (per filter, per year)}$$

#### Baseline Emissions for HHFF Filters:

Vintage Year 2018:

$$BE_y = B_{b,y} * (f_{NRB,b,y} * EF_{b,fuel,CO2}) + (EF_{b,fuel,CH4} + EF_{b,fuel,N2O}) * NCV_{b,fuel}$$

$$B_{b,y} = (1 - C_j) * N_{i,y} * W_{i,y} * (Q_{j,y} + Q_{j,rawboil,y})$$

$$B_{b,y} = (1-0.18) * 2,059 * 0.0005496 * (5.53+0) = 5.124 \text{ tonnes}$$

$$BE_y = 5.124 \text{ tonnes} (0.92 * 112 \text{ tCO}_2/\text{TJ}) + (0.75 \text{ t}_{CH4}/\text{TJ} + 1.192 \text{ t}_{N20}/\text{TJ}) * 0.015 \text{ TJ/tonne}$$

$$= 8.070 \text{ tCO}_2\text{e (per filter, per year)}$$

Vintage Year 2019:

$$BE_y = B_{b,y} * (f_{NRB,b,y} * EF_{b,fuel,CO2}) + (EF_{b,fuel,CH4} + EF_{b,fuel,N2O}) * NCV_{b,fuel}$$

$$B_{b,y} = (1 - C_j) * N_{i,y} * W_{i,y} * (Q_{j,y} + Q_{j,rawboil,y})$$

$$B_{b,y} = (1-0.18) * 2,059 * 0.0005496 * (5.53+0) = 5.124 \text{ tonnes}$$

$$BE_y = 5.124 \text{ tonnes} (0.92 * 112 \text{ tCO}_2/\text{TJ}) + (0.75 \text{ t}_{CH4}/\text{TJ} + 1.192 \text{ t}_{N20}/\text{TJ}) * 0.015 \text{ TJ/tonne}$$

$$= 8.070 \text{ tCO}_2\text{e (per filter, per year)}$$

#### Baseline Emissions for IHFF Filters:

Vintage Year 2018:

$$BE_y = B_{b,y} * (f_{NRB,b,y} * EF_{b,fuel,CO2}) + (EF_{b,fuel,CH4} + EF_{b,fuel,N2O}) * NCV_{b,fuel}$$

$$B_{b,y} = (1 - C_j) * N_{i,y} * W_{i,y} * (Q_{j,y} + Q_{j,rawboil,y})$$

$$B_{b,y} = (1-0.76) * N_{i,i} * 0.000544 * (0.87+0) = 0.0001142 \text{ (when } N_{j,i} \text{ is assumed to be}$$

	<p>1)</p> $BE_y = 0.0001142 * (0.92*112 \text{ tCO}_2/\text{TJ}) + (0.75 \text{ t}_{\text{CH}_4}/\text{TJ} + 1.192 \text{ t}_{\text{N}_2\text{O}}/\text{TJ}) * 0.015 \text{ TJ/tonne}$ <p>= 194 tCO<sub>2</sub>e (for all filters)</p> <p>Vintage Year 2019:</p> $BE_y = B_{b,y} * (f_{\text{NRB},b,y} * EF_{b,\text{fuel},\text{CO}_2}) + (EF_{b,\text{fuel},\text{CH}_4} + EF_{b,\text{fuel},\text{N}_2\text{O}}) * NCV_{b,\text{fuel}}$ $B_{b,y} = (1 - C_j) * N_{i,y} * W_{i,y} * (Q_{j,y} + Q_{j,\text{rawboil},y})$ $B_{b,y} = (1 - 0.76) * N_{j,i} * 0.000544 * (0.87 + 0) = 0.0001142 \text{ (when } N_{j,i} \text{ is assumed to be 1)}$ $BE_y = 0.0001142 * (0.92*112 \text{ tCO}_2/\text{TJ}) + (0.75 \text{ t}_{\text{CH}_4}/\text{TJ} + 1.192 \text{ t}_{\text{N}_2\text{O}}/\text{TJ}) * 0.015 \text{ TJ/tonne}$ <p>= 28 tCO<sub>2</sub>e (for all filters)</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> <li>• /MR/</li> <li>• /ER/</li> <li>• /XLS/</li> <li>• /TA/</li> <li>• /PDD/</li> </ul>						
<b>Findings</b>	<table border="1"> <tr> <td data-bbox="454 902 528 1261" style="text-align: center; vertical-align: middle;"><input type="checkbox"/></td> <td data-bbox="528 902 1461 1261"> <p>The calculation of the baseline emissions was found to be fully compliant with the above stated principles.</p> <p>The calculations of baseline GHG emissions or baseline net GHG removals have been carried out in accordance with the formulae and methods described in the registered monitoring plan, the applied methodology and, where applicable, the applied standardized baseline. Any assumptions used in emission or removal calculations have been justified. Appropriate emission factors, IPCC default values, GWPs and other reference values have been correctly applied.</p> <p>No errors, miscalculations, omissions, misstatements or incomplete information has been identified.</p> </td> </tr> <tr> <td data-bbox="454 1261 528 1330" style="text-align: center; vertical-align: middle;"><input checked="" type="checkbox"/></td> <td data-bbox="528 1261 1461 1330"> <p>The verification team has identified mistakes in the baseline emissions calculation or the underlying calculation approaches.</p> </td> </tr> <tr> <td data-bbox="454 1330 528 1408" style="text-align: center; vertical-align: middle;"><input checked="" type="checkbox"/></td> <td data-bbox="528 1330 1461 1408"> <p>In this context the following CARs, CLs, FARs have been raised: CL 07, CAR 07, CAR 08</p> </td> </tr> </table>	<input type="checkbox"/>	<p>The calculation of the baseline emissions was found to be fully compliant with the above stated principles.</p> <p>The calculations of baseline GHG emissions or baseline net GHG removals have been carried out in accordance with the formulae and methods described in the registered monitoring plan, the applied methodology and, where applicable, the applied standardized baseline. Any assumptions used in emission or removal calculations have been justified. Appropriate emission factors, IPCC default values, GWPs and other reference values have been correctly applied.</p> <p>No errors, miscalculations, omissions, misstatements or incomplete information has been identified.</p>	<input checked="" type="checkbox"/>	<p>The verification team has identified mistakes in the baseline emissions calculation or the underlying calculation approaches.</p>	<input checked="" type="checkbox"/>	<p>In this context the following CARs, CLs, FARs have been raised: CL 07, CAR 07, CAR 08</p>
<input type="checkbox"/>	<p>The calculation of the baseline emissions was found to be fully compliant with the above stated principles.</p> <p>The calculations of baseline GHG emissions or baseline net GHG removals have been carried out in accordance with the formulae and methods described in the registered monitoring plan, the applied methodology and, where applicable, the applied standardized baseline. Any assumptions used in emission or removal calculations have been justified. Appropriate emission factors, IPCC default values, GWPs and other reference values have been correctly applied.</p> <p>No errors, miscalculations, omissions, misstatements or incomplete information has been identified.</p>						
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<input checked="" type="checkbox"/>	<p>In this context the following CARs, CLs, FARs have been raised: CL 07, CAR 07, CAR 08</p>						
<b>Conclusion</b>	<table border="1"> <tr> <td data-bbox="454 1408 528 1478" style="text-align: center; vertical-align: middle;"><input type="checkbox"/></td> <td data-bbox="528 1408 1461 1478"> <p>No CARs / CLs / FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.</p> </td> </tr> <tr> <td data-bbox="454 1478 528 1581" style="text-align: center; vertical-align: middle;"><input checked="" type="checkbox"/></td> <td data-bbox="528 1478 1461 1581"> <p>The raised CARs / CLs / FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.</p> </td> </tr> <tr> <td colspan="2" data-bbox="454 1581 1461 1814"> <p>The calculations of baseline GHG emissions have been carried out in accordance with the equations and methods described in the registered monitoring plan and applied methodology.</p> <p>Any assumptions used in emission or removal calculations have been justified. Appropriate emission factors, defaults, and other reference values have been correctly applied.</p> <p>It can be confirmed that the baseline calculation is overall correct.</p> </td> </tr> </table>	<input type="checkbox"/>	<p>No CARs / CLs / FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.</p>	<input checked="" type="checkbox"/>	<p>The raised CARs / CLs / FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.</p>	<p>The calculations of baseline GHG emissions have been carried out in accordance with the equations and methods described in the registered monitoring plan and applied methodology.</p> <p>Any assumptions used in emission or removal calculations have been justified. Appropriate emission factors, defaults, and other reference values have been correctly applied.</p> <p>It can be confirmed that the baseline calculation is overall correct.</p>	
<input type="checkbox"/>	<p>No CARs / CLs / FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.</p>						
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<p>The calculations of baseline GHG emissions have been carried out in accordance with the equations and methods described in the registered monitoring plan and applied methodology.</p> <p>Any assumptions used in emission or removal calculations have been justified. Appropriate emission factors, defaults, and other reference values have been correctly applied.</p> <p>It can be confirmed that the baseline calculation is overall correct.</p>							

#### D.4.2. Calculation of project GHG emissions or actual net anthropogenic GHG removals by sinks

<b>Means of verification</b>	<p>During the verification the calculation of project GHG emissions has been checked. In detail the following has been verified:</p> <ul style="list-style-type: none"> <li>• Transparency: It has been checked whether the calculation of project</li> </ul>
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emissions is fully traceable and, where used, the Excel calculation provides all calculation formulae.

- Parameter consistency: It has been checked whether all internal and external parameters and data used for the calculation are applied consistently in the monitoring report and the calculation spreadsheet.
- Correctness: It has been checked whether the applied formulae and methods for calculating project emissions are in accordance with the monitoring plan and the approved methodology.
- Completeness: It has been checked whether all calculations are complete and without omissions.

### Project Emissions

Project Emissions are calculated as follows:

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2}) + EF_{p,fuel,nonCO2} * NCV_{p,fuel}$$

Where :

$PE_y$  = Project Emissions in year y

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

$f_{NRB,p,y}$  = Fraction of biomass used in year y for project scenario p that can be established as non-renewable biomass

$EF_{p,fuel,CO2}$  = CO<sub>2</sub> emission factor of the fuel that is substituted or reduced

$EF_{p,fuel,nonCO2}$  = Non-CO<sub>2</sub> emission factor of the fuel that is substituted or reduced

$NCV_{p,fuel}$  = Net calorific value of the fuel that is substituted or reduced

The general equation for the calculation of  $B_{p,y}$  is as follows : -

$$B_{p,y} = (1 - C_j) * N_{p,y} * W_{p,y} * (Q_{p,raw,boil,y} + Q_{p,clea,boil,y})$$

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 who in the baseline are already consuming safe water without boiling it

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

$Q_{p,y}$ : Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day

$Q_{p,raw,boil,y}$ : Quantity of raw water boiled in the project scenario p per person per day

$Q_{p,clea,boil,y}$ : 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 using technologies representative of the project scenario p during project year y

### Project Emissions for BSF Filters:

Vintage Year 2018:

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2}) + EF_{p,fuel,nonCO2} * NCV_{p,fuel}$$

$$B_{p,y} = (1 - C_j) * N_{p,y} * W_{p,y} * (Q_{p,raw,boil,y} + Q_{p,clea,boil,y})$$

$$B_{p,y} = (1-0.18) * 2,843 * 0.0005496 * (0+0) = 0 \text{ tonnes}$$

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2}) + EF_{p,fuel,nonCO2} * NCV_{p,fuel}$$

$$PE_{p,y} = 0 \text{ tonnes } (0.92 * 112 \text{ tCO}_2/\text{TJ}) + (0.75 \text{ t}_{CH4}/\text{TJ} + 1.192 \text{ t}_{N20}/\text{TJ}) * 0.015 \text{ TJ/tonne} = 0 \text{ tCO}_2\text{e}$$

Vintage Year 2019:

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2}) + EF_{p,fuel,nonCO2} * NCV_{p,fuel}$$

$$B_{p,y} = (1 - C_j) * N_{p,y} * W_{p,y} * (Q_{p,raw,boil,y} + Q_{p,clea,boil,y})$$

$$B_{p,y} = (1-0.18) * 2,843 * 0.0005496 * (0+0) = 0 \text{ tonnes}$$

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2}) + EF_{p,fuel,nonCO2} * NCV_{p,fuel}$$

$$PE_{p,y} = 0 \text{ tonnes } (0.92 * 112 \text{ tCO}_2/\text{TJ}) + (0.75 \text{ t}_{CH4}/\text{TJ} + 1.192 \text{ t}_{N20}/\text{TJ}) * 0.015 \text{ TJ/tonne} = 0 \text{ tCO}_2\text{e}$$

**Project Emissions for HHFF Filters:**

Vintage Year 2018:

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2} + EF_{p,fuel,nonCO2}) * NCV_{p,fuel}$$

$$B_{p,y} = (1 - C_j) * N_{p,y} * W_{p,y} * (Q_{p,raw,boil,y} + Q_{p,clean,boil,y})$$

$$B_{p,y} = (1-0.18) * 2,059 * 0.0005496 * (0+0) = 0 \text{ tonnes}$$

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2} + EF_{p,fuel,nonCO2}) * NCV_{p,fuel}$$

$$PE_{p,y} = 0 \text{ tonnes } (0.92*112 \text{ tCO}_2/\text{TJ}) + (0.75 \text{ t}_{CH4}/\text{TJ}+1.192 \text{ t}_{N20}/\text{TJ}) * 0.015 \text{ TJ/tonne}$$

$$= 0 \text{ tCO}_2e$$

Vintage Year 2019:

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2} + EF_{p,fuel,nonCO2}) * NCV_{p,fuel}$$

$$B_{p,y} = (1 - C_j) * N_{p,y} * W_{p,y} * (Q_{p,raw,boil,y} + Q_{p,clean,boil,y})$$

$$B_{p,y} = (1-0.18) * 2,059 * 0.0005496 * (0+0) = 0 \text{ tonnes}$$

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2} + EF_{p,fuel,nonCO2}) * NCV_{p,fuel}$$

$$PE_{p,y} = 0 \text{ tonnes } (0.92*112 \text{ tCO}_2/\text{TJ}) + (0.75 \text{ t}_{CH4}/\text{TJ}+1.192 \text{ t}_{N20}/\text{TJ}) * 0.015 \text{ TJ/tonne}$$

$$= 0 \text{ tCO}_2e$$

**Project Emissions for IHFF Filters:**

Vintage Year 2018:

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2} + EF_{p,fuel,nonCO2}) * NCV_{p,fuel}$$

$$B_{p,y} = (1 - C_j) * N_{p,y} * W_{p,y} * (Q_{p,raw,boil,y} + Q_{p,clean,boil,y})$$

$$B_{p,y} = (1-0.76) * N_{p,y} * 0.000544 * (0+0) = 0 \text{ tonnes}$$

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2} + EF_{p,fuel,nonCO2}) * NCV_{p,fuel}$$

$$PE_{p,y} = 0 \text{ tonnes } (0.92*112 \text{ tCO}_2/\text{TJ}) + (0.75 \text{ t}_{CH4}/\text{TJ}+1.192 \text{ t}_{N20}/\text{TJ}) * 0.015 \text{ TJ/tonne}$$

$$= 0 \text{ tCO}_2e$$

Vintage Year 2019:

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2} + EF_{p,fuel,nonCO2}) * NCV_{p,fuel}$$

$$B_{p,y} = (1 - C_j) * N_{p,y} * W_{p,y} * (Q_{p,raw,boil,y} + Q_{p,clean,boil,y})$$

$$B_{p,y} = (1-0.76) * N_{p,y} * 0.000544 * (0+0) = 0 \text{ tonnes}$$

$$PE_{p,y} = B_{p,y} * (f_{NRB,p,y} * EF_{p,fuel,CO2} + EF_{p,fuel,nonCO2}) * NCV_{p,fuel}$$

$$PE_{p,y} = 0 \text{ tonnes } (0.92*112 \text{ tCO}_2/\text{TJ}) + (0.75 \text{ t}_{CH4}/\text{TJ}+1.192 \text{ t}_{N20}/\text{TJ}) * 0.015 \text{ TJ/tonne}$$

$$= 0 \text{ tCO}_2e$$

Thus,

$$PE_y = 0$$

The following sources of information have been used in this context:

- /MR/
- /PDD/
- /ER/

<b>Findings</b>	<input checked="" type="checkbox"/>	The calculation of the project emissions was found to be fully compliant with the above stated principles.  The calculations of project GHG emissions or actual net GHG removals have been carried out in accordance with the formulae and methods described in the registered monitoring plan, the applied methodology and, where applicable, the applied standardized baseline. Any assumptions used in emission or removal calculations have been justified. Appropriate emission factors, IPCC default values, GWPs and other reference values have been correctly applied.  No errors, miscalculations, omissions, misstatements or incomplete information have been identified.
	<input type="checkbox"/>	The verification team has identified mistakes in the project emissions calculation or the underlying calculation approaches.
	<input type="checkbox"/>	In this context the following CARs, CLs, FARs have been raised:
	<input type="checkbox"/>	N/A
<b>Conclusion</b>	<input checked="" type="checkbox"/>	No CARs / CLs / FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.

	<input type="checkbox"/>	The raised CARs / CLs / FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		The calculation of project GHG emissions is correct. The calculations of project GHG emissions have been carried out in accordance with to the equation and methods described in the registered / approved revised PDDs and applied methodology.

#### D.4.3. Calculation of leakage GHG emissions

<b>Means of verification</b>		During the verification it has been checked whether leakage emissions have to be considered and, in cases where leakage emissions have to be calculated, the respective calculation of leakage GHG emissions has been checked. In such cases the same verification principles have been considered as for the baseline and project emissions calculation.
		<p><b>Leakage Emissions</b></p> <p>No leakage emissions are envisaged in the PDD</p> <p><math>LE_y = 0 \text{ tCO}_2\text{e}</math></p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> <li>• /MR/</li> <li>• /PDD/</li> <li>• /METH/</li> </ul>
<b>Findings</b>	<input type="checkbox"/>	No leakage emissions were to be considered ( $LE = 0$ ).
	<input type="checkbox"/>	<p>The calculation of the leakage emissions was found to be fully compliant with the above stated principles (see 8.1 and 8.2).</p> <p>The calculations of leakage GHG emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan, the applied methodology and, where applicable, the applied standardized baseline. Any assumptions used in leakage emissions calculations have been justified. Where applicable, appropriate emission factors, IPCC default values, GWPs and other reference values have been correctly applied.</p> <p>No errors, miscalculations, omissions, misstatements or incomplete information have been identified.</p>
	<input checked="" type="checkbox"/>	The verification team has identified mistakes in the project emissions calculation or the underlying calculation approaches.
	<input checked="" type="checkbox"/>	In this context the following CARs, CLs, FARs have been raised: CL 02
<b>Conclusion</b>	<input type="checkbox"/>	No CARs / CLs / FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs / CLs / FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		No leakage is considered

#### D.4.4. Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

<b>Means of verification</b>	<p>The verification team has checked if the MR includes a summary table of the emission reductions calculation specifying separately</p> <ul style="list-style-type: none"> <li>- Total baseline emissions,</li> <li>- Total project emissions,</li> </ul>
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	<ul style="list-style-type: none"> <li>- Total leakage,</li> <li>- Total emission reductions.</li> </ul> <p>It has been assessed whether the values are correct or need to be revised as a consequence of issues identified above</p> <p>Section E.4 of MR demonstrate the summary of GHG emission reductions for the monitoring period and calculated according to the applied methodology as follows:</p> $ER_y = BE_y - PE_y - LE_y$ $= 43,431 \text{ tCO}_2\text{e} - 0 - 0$ $= \mathbf{43,431 \text{ tCO}_2\text{e}}$	
<b>Findings</b>	<input checked="" type="checkbox"/>	Section E.4 of the MR includes in a summary table of the emission reductions calculation.
	<input checked="" type="checkbox"/>	The summary table specified the total baseline, project and leakage emissions as well as the total emission reductions separately.
	<input type="checkbox"/>	The values as specified in the ER summary table are correct; no issues have been identified during the verification which requires changes in the ER calculation.
	<input type="checkbox"/>	During the verification, issues with impact on the ER calculation have been identified.
	<input type="checkbox"/>	In this context the following CARs, CLs, FARs have been raised: N/A
<b>Conclusion</b>	<input checked="" type="checkbox"/>	No CARs / CLs / FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	<input type="checkbox"/>	The raised CARs / CLs / FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	The summary table in the MR has been filled correctly and the values are in line with the related emissions reduction spread-sheet after correction.	

#### D.4.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

<b>Means of verification</b>	<p>The verification team has checked if the MR includes a comparison of actual values of the monitoring period with the estimations in the registered PDD.</p> <p>Section E.5 of the MR includes a comparison of the calculated actual emission reductions with the ex-ante calculated values in the registered PDD.</p> <p>For this monitoring period from 19/02/2018 to 18/02/2019 (both days included) the project achieved <b>43,431 tCO<sub>2</sub>e</b> of GHG emission reductions.</p> <p>The estimated annual average ex-ante GHG emission reductions in the registered PDD for this monitoring period are <b>38,258 tCO<sub>2</sub>e</b>.</p> <p>The actual emission reduction achieved during this MP is <b>113.52% of</b> the estimated ex-ante emission reductions in the registered PDD</p> <p>It has further checked which of the below listed cases is applicable for the calculated ER of the current monitoring period.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> <li>• /MR/</li> <li>• /PDD/</li> <li>• /XLS/</li> </ul>	
<b>Findings</b>	<input checked="" type="checkbox"/>	Case 1: The ex-ante estimated value was found to be proportionally higher than the ex-post determined value. No further action is deemed required.
	<input type="checkbox"/>	Case 2: The ex-ante estimated value fits very good to the actually monitored value. No further justification is deemed required.
	<input type="checkbox"/>	Case 3: The ex-ante estimated value was found to be proportionally lower than the ex-post determined value.
	<input checked="" type="checkbox"/>	In this context the following CARs, CLs, FARs have been raised:

		CL 08
Conclusion	<input type="checkbox"/>	No CARs / CLs / FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs / CLs / FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	The ex-ante estimated value was found to be proportionally higher than the ex-post determined value. No further action is deemed required.	

#### D.4.6. Remarks on difference from estimated value in registered PDD

Means of verification	For this monitoring period, the actual emission reductions are <b>13.52%</b> higher than the estimated emission reductions in the registered PDD.		
Findings	<input type="checkbox"/>	No further justification or explanation is deemed required as actual emissions of this MP do not exceed significantly the ex-ante calculated emission reductions (applicable for case 1 and 2).	
	<input checked="" type="checkbox"/>	<p><i>For case 3: The PP has provided a related justification in the MR. The reasons for the increase are as follows:</i></p> <ul style="list-style-type: none"> <li>- <math>Q_{p,y}</math> for BSF was estimated ex-ante as 5.0 litres, but it was 6.56 litres monitored value for MP5.</li> <li>- Usage rate for BSF was estimated ex-ante at 80%, but a usage of 90.65% is the monitored value</li> <li>- <math>Q_{p,y}</math> for HHFF was estimated ex-ante as 5.0 litres, but it was 5.53 litres monitored value for MP5.</li> <li>- Usage rate for HHFF was estimated ex-ante at 80%, but a usage of 85.41% is the monitored value</li> <li>- <math>N_{j,y}</math> for BSF and HHFF were estimated at 1,825 person.days. However, actual values achieved during monitoring period are 2,843 and 2,059 person.days respectively.</li> </ul>	
	<input type="checkbox"/>	In this context the following CARs, CLs, FARs have been raised:	
Conclusion	<input checked="" type="checkbox"/>	No CARs / CLs / FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.	
	<input type="checkbox"/>	The raised CARs / CLs / FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.	
	It is concluded the ex-post emission reductions are higher than the ex-ante estimated values in the registered PDD. And the justification is reasonable.		

#### D.5. Assessment of reported sustainable development co-benefits

Means of verification	The monitoring of the contribution to sustainable development during this monitoring period according to the sustainability monitoring plan has been verified as follows:			
	Sustainable development indicator	Chosen parameter	Frequency	Assessment by verification team
	SDG 3 - Good health and well-being	<ul style="list-style-type: none"> <li>- <math>U_{p,y}</math></li> <li>- Number of filters sold</li> <li>- Monitoring questionnaires for water borne diseases and air quality</li> </ul>	Annually	This SDG Indicator is measured annually, by monitoring the projects implementation of the water purification units and their usage, contribution to reducing water borne diseases and improvements in air quality. From the monitoring results of the chosen parameters, the VVB can confirm that the program has contributed to achieving this SDG goal
	SDG 6 - Clean	Training records	Annually	This parameter is measured

	water and sanitation			annually, by monitoring the projects training programs and workshops on filter assembly, installation, use and maintenance. The PP could confirm and provided evidence of trainings conducted during this monitoring period. Therefore, the program has positively contributed to enhancing this SDG goal.
	SDG 8 - Decent work and Economic growth	<ul style="list-style-type: none"> <li>- Number employed</li> <li>- Wages</li> <li>- Income from partners (retailers)</li> </ul>	Annually	This parameter is measured annually by monitoring the number of people employed by the project, their wages, and other business such as partner organizations (retailers). The PP could confirm and provided evidence of employment numbers for their permanent staff, their wages as well as for temporary staff. Therefore, the program has positively contributed to enhancing this SDG goal
	SDG 9 - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	<ul style="list-style-type: none"> <li>- Number attending trainings, workshops and seminars on water filters</li> </ul>	Annually	This parameter tracks knowledge transfer in installation, maintenance and replacement of filters. This is measured through the number of people attending such trainings in the program area. Therefore, the program has positively contributed to enhancing this SDG goal
	SDG 13 - Climate Action	<ul style="list-style-type: none"> <li>- Number of project technologies distributed</li> <li>- Usage rate (U<sub>p,y</sub>)</li> <li>- Campaigns, workshops and seminars</li> </ul>	Annually	This SDG parameter is measured by the number of trainings and awareness campaigns on matters environment. This is also contributed to through the project clean technologies and usage rates. Therefore, the program has positively contributed to enhancing this SDG goal
	<p>During the site visit, the verifier has randomly selected local stakeholders to confirm that the correctness of the parameters reported by the PP. The verifier also interviewed the PP permanent and temporary staff on issues to do with training, recruitment, and wages</p> <p>The Verification Team along with onsite observation, objective evidence collections, data generation and recording analysis also considered the views obtained in these interviews while arriving at the verification opinion.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none"> <li>• /MR/</li> <li>• /TR/</li> <li>• /ER/</li> <li>• /EMP/</li> <li>• /XLS/</li> <li>• /Onsite Interviews/</li> </ul>			
<b>Findings</b>	<input type="checkbox"/>	The sustainable monitoring parameter are monitored in line with the GS requirement and passport of this project. No adverse finding has been identified in the course of this verification.		
	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context:		
		- CAR 04, CAR 05, CAR 06		

<b>Conclusion</b>	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	In summary, the verification team confirms that the project under the Gold Standard results in a positive contribution to local sustainable development.	

#### D.6. Grievance Mechanism/Continues Inputs

<b>Means of verification</b>	As confirmed through the onsite visit and interview with the local stakeholders, the Grievance Mechanism/Continuous Inputs has been in place. Section F.1 of the MR indicates the complaints mainly due to functionality, and how the issues were resolved.	
<b>Findings</b>	<input checked="" type="checkbox"/>	The Grievance Mechanism/Continuous Inputs has been in place. No adverse finding has been identified in the course of this verification.
	<input type="checkbox"/>	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context:
		- N/A
<b>Conclusion</b>	<input checked="" type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	All the methods of continuous input /grievance mechanism are confirmed during on-site investigation and interviews. There are no comments/complaints received from the stakeholders during this monitoring period of the project activity other than repair and warranty claims.	

#### SECTION E. Internal quality control

Before the submission of the final verification report a technical review of the whole verification procedure was carried out. The technical reviewers are competent GHG auditors being appointed for the scope this project falls under. The technical reviewers are not considered to be part of the verification team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the verification opinion and the topic specific assessments as prepared by the verification team leader may have been confirmed or revised. Furthermore reporting improvements might have been achieved.

After the successful technical review an overall (esp. procedural) assessment of the complete verification has been carried out by a senior assessor located in the accredited premises of TÜV NORD.

After this step the submission for requesting for issuance is conducted.

## SECTION F. Verification opinion

Aqua Clara Foundation has commissioned the TÜV NORD JI/CDM Certification Program to carry out the Gold Standard 5<sup>th</sup> periodic verification of the project: “Aqua Clara Water Filtration Program in Kenya”, with regard to the relevant requirements for GS project activities. The project activity enables rural, peri-urban and urban households and institutions/commercial entities to access affordable ACI water purification technologies as alternatives to boiling of drinking water using non-renewable biomass (firewood). Thus, the project contributes to sustainability development. This verification covers the period from 19/02/2018 to 18/02/2019, including both days.

As a result of this verification, the verifier confirms that:

- all operations of the project are implemented and installed as planned and described in the validated project design document.
- the monitoring plan is in accordance with the applied approved GS methodology, i.e., Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC); 11/04/2011.
- the installed equipment essential for measuring parameters required for calculating emission reductions are calibrated appropriately.
- the monitoring report is in accordance with the relevant GS requirements.
- the project contributes to sustainability development.
- the monitoring system is in place and functional. The project has generated GHG emission reductions.

TÜV NORD JI/CDM CP further confirms that the project has achieved emission reductions in the above mentioned reporting period as follows:

Emission reductions:

<b>19/02/2018 - 31/12/2018</b>	<b>01/01/2019 - 18/02/2019</b>
37,405 tCO <sub>2</sub> e	6,026 tCO <sub>2</sub> e
<b>Total</b>	<b>43,431 tCO<sub>2</sub>e</b>

**SECTION G. Certification statement**

As a duly accredited UN and GS-VVB, TÜV NORD CERT confirms that the project  
**“Aqua Clara Water Filtration Program in Kenya”**

registered under

GS-No. : 1078

has achieved emission reductions in accordance with all applicable requirements for registered GS4GG project activities during the current monitoring period

MP-No.: 5th

from: 19/02/2018


to: 18/02/2019

(including both days) as follows:

Emission reductions:

<b>19/02/2018 - 31/12/2018</b>	<b>01/01/2019 - 18/02/2019</b>
37,405 tCO <sub>2</sub> e	6,026 tCO <sub>2</sub> e
<b>Total</b>	<b>43,431 tCO<sub>2</sub>e</b>

David Lubanga




Team Leader  
Kigali, 08/08/2019

## Abbreviations

Abbreviations	Full Texts
BAU	Business as usual
BSF	Biosand Filter
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CME	Coordinating / Managing Entity
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
CP	Certification Program
CPA	Component Project Activity
CPA-DD	Component Project Activity Design Document
CPI	Crediting Period I
DNA	Designated National Authority
EB	CDM Executive Board
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GSCP	Global Stakeholder Consultation Process
IPCC	Intergovernmental Panel on Climate Change
HFF	Hollow Fiber Filters
HH	Household
HHFF	Household Hollow Fiber Filters
IHFF	Institutional Hollow Fiber Filters
KT	Kitchen Test
KPT	Kitchen Performance Test
LSC	Local Stakeholder Consultation
LSCR	Local Stakeholder Consultation Report
PD	Project Developer
PE	Project Entity
PoA	Programme of Activities
PoA-DD	Programme of Activities Design Document
PS	CDM project standard for programmes of Activities
QA/QC	Quality control/Quality assurance
SD	Sustainable Development
SDG	Sustainable Development Goal
SDI	Sustainable Development Indicator
TSR	Total Sales Record
UNFCCC	United Nations Framework Convention on Climate Change
VT	Validation/Verification Team
VVB	Validation and Verification Body
VVS	CDM validation and verification standard for programmes of Activities

# Appendix 1. Competence of team members and technical reviewers



**Statement of Competence**  
Assessment and verification according to the procedures of the TUV NORD JKCDM Certification Program

**Mr. David Lubanga**


SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2025-10-30
VCE / ISO 14004:2	Senior Assessor Technical Reviewer	2025-10-30

Authorisation status for technical areas within national scopes

CODE	TECHNICAL AREA
1.2	Renewables
3.1	Energy demand
13.2	Manure

251 - Rev. 7, Date: 2018-10-19

ISO 9001:2015 / IAF 1001:2015



**Statement of Competence**  
Assessment and verification according to the procedures of the TUV NORD JKCDM Certification Program

**Ms. Xue Jiao Fancy Zhao**


SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2026-11-01
VCS / ISO 14004:2	Senior Assessor Technical Reviewer	2026-11-01

Authorisation status for technical areas within national scopes

CODE	TECHNICAL AREA
1.2	Renewables
3.1	Energy Demand
8.1	Mining and mineral production
13.1	Solid waste and wastewater
13.2	Manure

236 - Rev. 8, Date: 2018-06-05

ISO 9001:2015 / IAF 1001:2015



**Statement of Competence**  
Assessment and verification according to the procedures of the TUV NORD JKCDM Certification Program

**Mr. Stefan Winter**

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2020-07-27
VCS	Senior Assessor (Validation, Verification) Technical Reviewer	2020-07-27

Authorisation status for technical areas within national scopes

CODE	TECHNICAL AREA
1.1	Thermal energy generation
1.2	Renewables
2.1	Energy distribution
3.1	Energy demand
4.1	Cement and lime production
4.2	Paper
1.2	Caprolactam, nitric acid and adipic acid
9.1	Aluminium and magnesium production
8.2	Iron, steel and Ferro-alloy production
11.1	Solid waste and wastewater
13.2	Manure

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ISO 9001:2015 / IAF 1001:2015

## Appendix 2. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1.	ClimateCare	<ol style="list-style-type: none"> <li>1. BSF TSR &amp; Sample Frame</li> <li>2. HHFF TSR &amp; Sample Frame</li> <li>3. IHFF TSR&amp; Sample Frame</li> </ol>	/XLS/	ClimateCare
2.	ClimateCare	<ol style="list-style-type: none"> <li>1. GS 1078 combined ER and MSS 18-19_version 1.0</li> <li>2. GS 1078 combined ER and MSS 18-19_v2.0</li> <li>3. GS 1078 combined ER and MSS 18-19_v3.0</li> <li>4. GS 1078 combined ER and MSS 18-19_v4.0</li> </ol>	/ER/	ClimateCare
3.	ClimateCare	<p>GS Monitoring Report of Aqua Clara Water Filtration Program in Kenya</p> <ul style="list-style-type: none"> <li>• version 01, dated 06/06/2019</li> <li>• version 02, dated 17/07/2019</li> <li>• version 03, dated 22/07/2019</li> </ul>	/MR/	ClimateCare
4.	GS	Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC); 11/04/2011	/METH/	GS Website
5.	TÜV NORD JI / CDM Certification Program	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)	/CP Manual/	TÜV NORD JI / CDM Certification Program
6.	Intergovernmental Panel on Climate Change	<ul style="list-style-type: none"> <li>• 1996 IPCC Guidelines for National Greenhouse Gas Inventories: work book</li> <li>• 2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book</li> </ul>	/IPCC/	<a href="http://www.ipcc-nggip.iges.or.jp">www.ipcc-nggip.iges.or.jp</a>
7.	UNFCCC	Kyoto Protocol (1997)	/KP/	UNFCCC
8.	UNFCCC	Decision 3/CMP. 1 (Marrakesh – Accords)	/MA/	UNFCCC
9.	ClimateCare	<ol style="list-style-type: none"> <li>1. GS Project Design Document for project: “Aqua Clara Water Filtration Program in Kenya”, version 18, dated 19/05/2014</li> <li>2. GS Project Design Document for project: “Aqua Clara Water Filtration Program in Kenya”, version 24, dated 25/05/2016</li> </ol>	/PDD/	ClimateCare
10.	TÜV NORD	Photographs of visited water purification units	/PHT/	Verification Team

No.	Author	Title	References to the document	Provider
11.	UNFCCC	CDM project standard for project activities (Version 02.0)	/PS/	UNFCCC
12.	UNFCCC	Standard: "Sampling and Surveys for CDM Project Activities and Programme of Activities" version 7.0	/SSS/	UNFCCC
13.	UNFCCC	CDM validation and verification standard for project activities (Version 02.0)	/VVS/	UNFCCC
14.	ClimateCare/GS	Transition Review Annex	/TRA/	ClimateCare
15.	GS	GS Performance Review for the 4 <sup>th</sup> Verification	/GPR/	ClimateCare
16.	GS	Guidelines for carrying out usage surveys for projects implementing household water filtration technologies	/GSUS/	GS
17.	GS	Monitoring Report Template v1.0	/MRT/	GS
18.	ClimateCare	3M Petrifilm Instructions manual	/3M/	ClimateCare
19.	ClimateCare	1. a COHESU Training participants 2. b Community WASH promotion participants 3. c CWP Training Participants Borabu 4. d HWTS Participants 5. e DEWT Participants-2018 6. f Entrepreneurship Training participants 7. g HWTS participants 8. h participants 1 9. h participants 2 10. h participants 3	/TR/	ClimateCare
20.	Aqua Clara	1. Employment Records 06062019 2. GS 1078 Employment Records Complete 3. Enumerators Employment records - xls 4. Employment records - xls	/EMP/	ClimateCare
21.	PP/GS	Transition Annex	/TA/	GS
22.	PP	Sample hard copy receipts (see unique IDs in C.4.2)	/HCR/	PP
<b>Websites</b>				
1.	GS	Gold Standard	<a href="http://www.goldstandard.org/">http://www.goldstandard.org/</a>	Website
2.	IPCC	IPCC publications	<a href="http://www.ipcc-nggip.iges.or.jp">www.ipcc-nggip.iges.or.jp</a>	Website
3.	UNFCCC	UNFCCC	<a href="http://cdm.unfccc.int">http://cdm.unfccc.int</a>	Website
4.	Aqua Clara Kenya	Aqua Clara Kenya	<a href="https://aquaclarakenya.com/">https://aquaclarakenya.com/</a>	Website
5.	Ministry of Environment and Forestry	Ministry of Environment and Forestry	<a href="http://www.environment.go.ke">www.environment.go.ke</a>	Website

## Appendix 3. Clarification requests, corrective action requests and forward action requests

**Table 1. Remaining FAR from validation and/or previous verification**

<b>FAR ID</b>	N/A	<b>Section no.</b>	-	<b>Date:</b> 24/06/2019
<b>Description of FAR</b>				
No FAR was raised during the previous monitoring period either by DOE or GS review				
<b>Project participant response (1<sup>st</sup> round)</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>				
<input type="checkbox"/>	Changes in the PDD	Section(s):	New version No.:	
<input type="checkbox"/>	Changes in MR	Section(s):	New version No.:	
<input type="checkbox"/>	Changes in XLS	Worksheet(s):	New version No.:	
<input type="checkbox"/>	Other:			
<b>DOE assessment (1<sup>st</sup> round)</b>				<b>Date:</b> DD/MM/YYYY
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>				
		<input type="checkbox"/> Additional action should be taken (finding remains open)		
		<input type="checkbox"/> The finding is closed		

**Table 2. CL from this verification**

<b>CL ID</b>	01	<b>Section no.</b>	A.1	<b>Date:</b> 24/06/2019
<b>Description of CL</b>				
MR version 1.0, section A.1				
<ol style="list-style-type: none"> <li>1. BSF: The total of 2938 is OK as per excel but not in the list in a) of the same section</li> <li>2. HHFF: Please clarify why cumulative total jumps from 97 to 111 in the spreadsheet</li> <li>3. IHFF: In Excel, TSR tab shows 98 just as totals below. And the sample frame tab shows 94 as A.1. Yet as per section D.3 of the MR version 1.0, the TSR should be equal to Sample Frame. Please correct or clarify</li> </ol>				
<b>Project participant response (1<sup>st</sup> round)</b>				<b>Date:</b> 08/07/2019
<ol style="list-style-type: none"> <li>1) The list on the MR report has been amended as per the total sales record.</li> <li>2) Cumulative filters is from 110 to 111 on the spreadsheet.</li> <li>3) PD has amended this statement as out of the 98 IHFF installed, 4 users were not available for the surveys hence the total number of IHFF sampled was 94.</li> </ol>				
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>				
<input type="checkbox"/>	Changes in the PDD	Section(s):	New version No.:	
<input checked="" type="checkbox"/>	Changes in MR	Section(s): A.1	New version No.: 2.0	
<input type="checkbox"/>	Changes in XLS	Worksheet(s):	New version No.:	
<input type="checkbox"/>	Other:			
<b>DOE assessment (1<sup>st</sup> round)</b>				<b>Date:</b> 16/07/2019
MR version 2.0, section A.1				
<ol style="list-style-type: none"> <li>1. Values have been corrected and the list is now consistent with the 2,938 value</li> <li>2. The provided spreadsheet is now corrected</li> <li>3. OK as clarified. The TSR value is not equal to the sample frame as 4 users were not available for the study</li> </ol>				
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>				
		<input type="checkbox"/> Additional action should be taken (finding remains open)		
		<input checked="" type="checkbox"/> The finding is closed		

<b>CL ID</b>	<b>02</b>	<b>Section no.</b>	<b>C</b>	<b>Date: 24/06/2019</b>
<b>Description of CL</b>				
MR version 1.0, section C (leakage assessment iii), It is not clear to me why consumption per HH is much higher than institutions. And not clear whether the fuel consumption is for water boiling or generally for all HH thermal needs				
<b>Project participant response (1<sup>st</sup> round)</b>				<b>Date: 08/07/2019</b>
Consumption per household was higher than for institutions because most households were boiling water in the baseline scenario unlike in institutions where water treatment method preferred was using treatment chemicals.				
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>				
<input type="checkbox"/>	Changes in the PDD	Section(s):	New version No.:	
<input checked="" type="checkbox"/>	Changes in MR	Section(s): C	New version No.: 2.0	
<input type="checkbox"/>	Changes in XLS	Worksheet(s):	New version No.:	
<input type="checkbox"/>	Other:			
<b>DOE assessment (1<sup>st</sup> round)</b>				<b>Date: 16/07/2019</b>
MR version 2.0, section C (leakage assessment iii), Most HHs boil water as opposed to institutions that opted for other water treatment methods. The higher consumption for households compared to institutions can be explained				
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>		<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

<b>CL ID</b>	<b>03</b>	<b>Section no.</b>	<b>B.1</b>	<b>Date: 24/06/2019</b>
<b>Description of CL</b>				
MR version 1.0, section D.2, Parameter Up,y, Please clarify why usage of IHFF has dropped drastically but increased notably for the BSF and HHFF				
<b>Project participant response (1<sup>st</sup> round)</b>				<b>Date: 08/07/2019</b>
Earlier this year, the project owners conducted an internal monitoring survey (before GS monitoring commenced) for all the BSF filters installed to follow up on usage. From the survey, 612 filters had been abandoned and the users were no longer willing to continue using these filters. Some of the reasons cited for abandoning the filters were some users had opted for HHFF, others were not willing to meet the maintenance costs, some users had died and those left with the filters did not maintain them or their use. From this survey, the project owner decided to remove completely abandoned filters from the sales records so as not to claim credits for filters that were not any use anymore and owners had no signs of using them. This in turn increased the usage rate as number of non-users were reduced. For IHFF, the same survey was not conducted, hence the drop-off rate went up hence affecting Usage rate.				
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>				
<input type="checkbox"/>	Changes in the PDD	Section(s):	New version No.:	
<input checked="" type="checkbox"/>	Changes in MR	Section(s): B.1	New version No.: 2.0	
<input type="checkbox"/>	Changes in XLS	Worksheet(s):	New version No.:	
<input type="checkbox"/>	Other:			
<b>DOE assessment (1<sup>st</sup> round)</b>				<b>Date: 16/07/2019</b>
MR version 2.0, section B.1 The elimination of some non-users resulted in a reflected higher usage rates for the BSF and HHFF users.				
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>		<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

<b>CL ID</b>	<b>04</b>	<b>Section no.</b>	<b>D.2</b>	<b>Date: 24/06/2019</b>
<b>Description of CL</b>				
MR version 1.0, section D.2 Please clarify the difference between the monitored parameters 'Volume of safe water consumed in the project scenario' and 'Q <sub>p,y</sub> '. Both shown as Q <sub>p,y</sub> in PDD				
<b>Project participant response (1<sup>st</sup> round)</b>				<b>Date: 08/07/2019</b>

QP,y/Q,p,y both stand for the volume of safe water consumed in the project scenario.		
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>		
<input type="checkbox"/> Changes in the PDD	Section(s):	New version No.:
<input type="checkbox"/> Changes in MR	Section(s):	New version No.:
<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<input type="checkbox"/> Other:		
<b>DOE assessment (1<sup>st</sup> round)</b>		<b>Date: 16/07/2019</b>
MR version 2.0, section C		
There is no difference between the parameters 'Volume of safe water consumed in the project scenario' and 'Q,p,y'		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed	

<b>CL ID</b>	<b>05</b>	<b>Section no.</b>	<b>D.2</b>	<b>Date: 24/06/2019</b>
<b>Description of CL</b>				
MR version 1.0, section D.2				
Parameter B <sub>b,y</sub>				
Clarification requested concerning this parameter: -				
<ol style="list-style-type: none"> <li>1. The parameter is not in section B.7.1 of the latest GS4GG PDD</li> <li>2. The drastic change from 6.714 tons in MP4 to 0.0001142 tons in MP5</li> <li>3. Whether it is per person or per institution(HH/School)</li> <li>4. The calculation seems to only consider per person/per day. However, the parameter simply states 'Tonnes' in the units.</li> </ol>				
<b>Project participant response (1<sup>st</sup> round)</b>				<b>Date: 08/07/2019</b>
<ol style="list-style-type: none"> <li>1. The parameter seems to have been left out on section B.7.1 however it reported on section B.6.4.</li> <li>2. Drastic change of B<sub>b,y</sub> for IHFF was actually due to a data entry error. The correct B<sub>b,y</sub> for MP4 was 0.0001142.</li> <li>3. B<sub>b,y</sub> is per person per institution.</li> <li>4. B<sub>b,y</sub> is in tons i.e the units are in tons.</li> </ol>				
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>				
<input type="checkbox"/> Changes in the PDD	Section(s):	New version No.:		
<input checked="" type="checkbox"/> Changes in MR	Section(s): D.2	New version No.: 2.0		
<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:		
<input type="checkbox"/> Other:				
<b>DOE assessment (1<sup>st</sup> round)</b>				<b>Date: 16/07/2019</b>
MR version 2.0, section C				
<ol style="list-style-type: none"> <li>1. B<sub>b,y</sub> is a calculated value</li> <li>2. Checked and deemed consistent with the value in the PDD. The correct value of 0.00011423 assumes a unit in a day (N<sub>i,y</sub> = 1)</li> <li>3. B<sub>b,y</sub> is per person per institution/household</li> <li>4. The units for B<sub>b,y</sub> have been clarified too VVB team as the calculated value would be in toones</li> </ol>				
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed			

<b>CL ID</b>	<b>06</b>	<b>Section no.</b>	<b>D.1</b>	<b>Date: 24/06/2019</b>
<b>Description of CL</b>				

MR Version 1.0, Section D.1	
The PP shall clarify the following in as far as fixed values are concerned	
<ol style="list-style-type: none"> <li>1. <math>EF_{b,fuel,CH_4}</math>: The application of 0.03 <math>t_{CH_4}/TJ</math> in the calculations while B.6.3 of PDD shows 0.3 <math>t_{CH_4}/TJ</math>. Several sections of the MR shows both 0.03 <math>t_{CH_4}/TJ</math> and 0.3 <math>t_{CH_4}/TJ</math>. Furthermore, the result of 7.5 is not consistent with <math>0.03*25</math>.</li> <li>2. GWP: The units of <math>GWP_{CH_4}</math> and <math>GWP_{N_2O}</math> are indicated as fraction. This is incorrect</li> </ol>	
<b>Project participant response (1<sup>st</sup> round)</b>	
<ol style="list-style-type: none"> <li>1. The correct figure is 0.03 PD has made all the required amendments on the MR, PDD figures were wrong.</li> <li>2. Correct units for GWP have been indicated.</li> </ol>	
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>	
<input type="checkbox"/> Changes in the PDD	Section(s): New version No.:
<input checked="" type="checkbox"/> Changes in MR	Section(s): D.1 New version No.: 2.0
<input type="checkbox"/> Changes in XLS	Worksheet(s): New version No.:
<input type="checkbox"/> Other:	
<b>DOE assessment (1<sup>st</sup> round)</b>	
Date: 08/07/2019	
MR Version 2.0, Section D.1	
<ol style="list-style-type: none"> <li>1. Corrections confirmed effected</li> <li>2. Units for both <math>GWP_{CH_4}</math> and <math>GWP_{N_2O}</math> have been corrected</li> </ol>	
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

<b>CL ID</b>	<b>07</b>	<b>Section no.</b>	<b>D.2</b>	<b>Date:</b> 24/06/2019
<b>Description of CL</b>				
MR Version 1.0, Section D.2				
<ol style="list-style-type: none"> <li>1. BSF: Please clarify why Usage rate and water quality is referred to as <math>Up,y</math> in the VER calculations</li> <li>2. BSF : Clarify why water quality is not applied in the VER calculations for 2019</li> <li>3. HHFF: Please clarify why Usage rate and water quality is referred to as <math>Up,y</math> in the VER calculations</li> <li>4. IHFF: Please clarify why Usage rate and water quality is referred to as <math>Up,y</math> in the VER calculations</li> <li>5. HHFF : Clarify why the usage rate of is applied for 2018 is 68.48% instead of the actual values from surveys, and indicated in the inputs tab and section D.2 of MR. Other sections of the MR shall be revisited</li> <li>6. HHFF: Water quality value applied in tab HHFF ER 2018 is not consistent with the value in the tab HHFF Inputs, D.2 of MR, and the survey results. The MR shall also be revisited</li> </ol>				
<b>Project participant response (1<sup>st</sup> round)</b>				
<ol style="list-style-type: none"> <li>1. BSF water quality rate amended.</li> <li>2. Water quality has been included in VER calculation for 2019 and Ers amended as well.</li> <li>3. HHFF water quality rate amended</li> <li>4. IHFF water quality rate amended</li> <li>5. Usage rate has been applied as per survey, MR sections corrected.</li> <li>6. Water quality values amended in ER tab 2018 to be consistent with the inputs tab and section D.2 of the MR.</li> </ol>				
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>				
Date: 19/07/2019				
<input type="checkbox"/> Changes in the PDD	Section(s):		New version No.:	
<input checked="" type="checkbox"/> Changes in MR	Section(s): D.2		New version No.: 2.0	
<input type="checkbox"/> Changes in XLS	Worksheet(s):		New version No.:	
<input type="checkbox"/> Other:				
<b>DOE assessment (1<sup>st</sup> round)</b>				
Date: 23/07/2019				

MR Version 2.0, Section D.2		
<ol style="list-style-type: none"> <li>1. Not corrected. Water quality is still referred to as <math>U_{p,y}</math> in tab 2018. Furthermore, <math>U_{p,y}</math> is referred to as 'usage survey' instead of 'usage rate'</li> <li>2. Not corrected. Water quality is still not included in the equation for 2019</li> <li>3. Not corrected. Water quality is still referred to as <math>U_{p,y}</math> in tab 2018 and tab 2019.</li> <li>4. Not corrected. Water quality and usage rate are still referred to as <math>U_{p,y}</math> in tab 'ER calculations IHFF'.</li> <li>5. Usage rate has been corrected to 85.41%. Other sections of the MR have also been revised</li> <li>6. The water quality value has been revised to 100% as requested, in line with monitoring results</li> </ol>		
<b>Project participant response (2nd round)</b>		
<ol style="list-style-type: none"> <li>1. DOE to use the attached version of the Ers spreadsheet.</li> <li>2. corrected.</li> <li>3. Corrected</li> <li>4. Corrected.</li> </ol>		
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>		<b>Date:</b> 23/07/2019
<input type="checkbox"/> Changes in the PDD	Section(s):	New version No.:
<input checked="" type="checkbox"/> Changes in MR	Section(s): D.2	New version No.: 3.0
<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<input type="checkbox"/> Other:		
<b>DOE assessment (2nd round)</b>		<b>Date:</b> 23/07/2019
MR Version 3.0, Section D.2		
<ol style="list-style-type: none"> <li>1. The references to usage rate and water quality have been revised in line with the monitoring plan</li> <li>2. Water quality is now included in the BSF equation</li> <li>3. The references to usage rate and water quality have been revised in line with the monitoring plan</li> <li>4. The references to usage rate and water quality have been revised in line with the monitoring plan</li> </ol>		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed	

<b>CL ID</b>	<b>08</b>	<b>Section no.</b>	<b>E.5</b>	<b>Date:</b> 24/06/2019
<b>Description of CL</b>				
MR Version 1.0, Section E.5				
The PP shall also include a comparison ex-ante and ex-post emission reductions per unit as part of the comparison for SDG 13				
<b>Project participant response (1<sup>st</sup> round)</b>				
PD has used comparison for the total in line with previous comments received from the GS for other water projects. PD has done so to avoid comments raised on this.				
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>				<b>Date:</b> 08/07/2019
<input type="checkbox"/> Changes in the PDD		Section(s):		New version No.:
<input checked="" type="checkbox"/> Changes in MR		Section(s): E.5		New version No.: 2.0
<input type="checkbox"/> Changes in XLS		Worksheet(s):		New version No.:
<input type="checkbox"/> Other:				
<b>DOE assessment (1<sup>st</sup> round)</b>				<b>Date:</b> 16/07/2019
MR Version 2.0, Section E.5				
Ex-ante and ex-post emission reductions are compared as a whole, in line with previous GS review feedback				
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed			

**Table 3. CAR from this verification**

<b>CAR ID</b>	<b>01</b>	<b>Section no.</b>	<b>All</b>	<b>Date:</b> 24/06/2019
<b>Description of CAR</b>				

MR Version 1.0, All sections		
Editorial : -		
In accordance with Comment/Request 1 (#3) in the previous GS performance review, and the current MR section A.1, the PP is requested to state the correct abbreviation for the water purification systems throughout the MR, consistent with the registered PDD		
<b>Project participant response (1<sup>st</sup> round)</b>		
PD has used the abbreviations on the monitoring report as they are more clear and do not bring in confusion. This was requested by the project owner as they are the same abbreviations they use. In MP4 MR recently issued, this abbreviations were used as well.		
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>		<b>Date: 08/07/2019</b>
<input type="checkbox"/> Changes in the PDD	Section(s):	New version No.:
<input checked="" type="checkbox"/> Changes in MR	Section(s): D.2	New version No.: 2.0
<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<input type="checkbox"/> Other:		
<b>DOE assessment (1<sup>st</sup> round)</b>		<b>Date: 16/07/2019</b>
MR Version 2.0, Section D.2		
The abbreviations have been clarified and applied consistently throughout the MR		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed	

<b>CAR ID</b>	<b>02</b>	<b>Section no.</b>	<b>Title Page</b>	<b>Date: 24/06/2019</b>
<b>Description of CAR</b>				
MR Version 1.0, Section Title Page				
Indicated emission reductions shall be consistent with section A.1 and the VER spreadsheet				
<b>Project participant response (1<sup>st</sup> round)</b>				
Emission reductions have been amended to be consistent with the MR and the ERs spread sheet.				
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>				<b>Date: 08/07/2019</b>
<input type="checkbox"/> Changes in the PDD	Section(s):		New version No.:	
<input checked="" type="checkbox"/> Changes in MR	Section(s): Page 2		New version No.: 2.0	
<input checked="" type="checkbox"/> Changes in XLS	Worksheet(s):		New version No.: 2.0	
<input type="checkbox"/> Other:				
<b>DOE assessment (1<sup>st</sup> round)</b>				<b>Date: 23/03/2017</b>
MR Version 2.0, Page 2				
Emission reductions have been indicated and reflected consistently throughout the documents				
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed			

<b>CAR ID</b>	<b>03</b>	<b>Section no.</b>	<b>A.2</b>	<b>Date: 24/06/2019</b>
<b>Description of CAR</b>				
MR Version 1.0, Section A.2				
<ol style="list-style-type: none"> <li>1. The section is not completed as per requirements of the GS4GG MR template version 1.0</li> <li>2. The table is not labeled</li> <li>3. Not all counties are indicated as per the defined project boundary in the latest PDD</li> </ol>				
<b>Project participant response (1<sup>st</sup> round)</b>				
<ol style="list-style-type: none"> <li>1) PD has included name of the host country.</li> <li>2) PD has labelled the table.</li> <li>3) All 23 counties are indicated on the table with their coordinated as well.</li> </ol>				
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>				<b>Date: 08/07/2019</b>
<input type="checkbox"/> Changes in the PDD	Section(s):		New version No.:	
<input checked="" type="checkbox"/> Changes in MR	Section(s): D.2		New version No.: 2.0	
<input type="checkbox"/> Changes in XLS	Worksheet(s):		New version No.:	

<input type="checkbox"/> Other:	
<b>DOE assessment (1<sup>st</sup> round)</b>	
<b>Date:</b> 16/07/2019	
MR Version 2.0, Section D.2	
<ol style="list-style-type: none"> <li>Host country has been included in line with the MR template version 1.0</li> <li>The table has been labeled as Table1</li> <li>All 23 counties are now included</li> </ol>	
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

<b>CAR ID</b>	<b>04</b>	<b>Section no.</b>	<b>D.2</b>	<b>Date:</b> 24/06/2019
<b>Description of CAR</b>				
MR Version 1.0, Section D.2				
SDG Parameter: 'Employment wages of people employed by the project'				
<ol style="list-style-type: none"> <li>The values indicated for both permanent and temporary employees do not match the evidence</li> <li>The wages are included in only part of the employees in a separate document. The wages are also not included, as required by the monitoring plan</li> </ol>				
<b>Project participant response (1<sup>st</sup> round)</b>				
<ol style="list-style-type: none"> <li>Permanent employees at Aqua Clara are 14 in total, employment records state the same. Additionally, 19 enumerators were hired on a short contract and enumerators records have been given as a support document. Records for the sales agents have also been provided as a support document.</li> <li>Wages for employees are confidential and the HR requests that they are not shared public Including them on the monitoring report is going against that. For that, PD has provided employment records and wages as a separate document. The final MR is always shared with Aqua Clara staff as well. Summary of agents' sales have been indicated on the MR and given them as a support document.</li> </ol>				
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>				<b>Date:</b> 08/07/2019
<input type="checkbox"/> Changes in the PDD	Section(s):		New version No.:	
<input checked="" type="checkbox"/> Changes in MR	Section(s): D.2		New version No.: <b>2.0</b>	
<input type="checkbox"/> Changes in XLS	Worksheet(s):		New version No.:	
<input type="checkbox"/> Other:				
<b>DOE assessment (1<sup>st</sup> round)</b>				<b>Date:</b> 16/07/2019
MR Version 2.0, Section D.2				
<ol style="list-style-type: none"> <li>The reference documentation have been checked and found the reported values to be correct</li> <li>Wage ranges for the sales agents are indicated and clearly above the host country's minimum wage laws</li> </ol>				
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed			

<b>CAR ID</b>	<b>05</b>	<b>Section no.</b>	<b>D.2</b>	<b>Date:</b> 24/06/2019
<b>Description of CAR</b>				
MR Version 1.0, Section D.2				
Parameter: 'Records of income generated by entrepreneurs enrolled in the project activity distribution programme'				
<ol style="list-style-type: none"> <li>Values to be updated from the previous MP4</li> </ol>				
<b>Project participant response (1<sup>st</sup> round)</b>				
Records of income generated by entrepreneurs and sales agents have been updated on the MR and records indicated.				
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>				<b>Date:</b> 08/07/2019
<input type="checkbox"/> Changes in the PDD	Section(s):		New version No.:	
<input checked="" type="checkbox"/> Changes in MR	Section(s): D.2		New version No.: 2.0	
<input type="checkbox"/> Changes in XLS	Worksheet(s):		New version No.:	

<input type="checkbox"/> Other:	
<b>DOE assessment (1<sup>st</sup> round)</b>	<b>Date: 16/07/2019</b>
MR Version 2.0, Section D.2	
1. Values have been updated consistent with the MP5 evidences	
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

<b>CAR ID</b>	<b>06</b>	<b>Section no.</b>	<b>D.2</b>	<b>Date: 24/06/2019</b>
<b>Description of CAR</b>				
MR Version 1.0, Section D.2				
Parameter: 'Number of people employed by the project'				
1. Values to be updated and be consistent with available evidence				
<b>Project participant response (1<sup>st</sup> round)</b>				
1) Number of people employed updated for consistency.				
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>				<b>Date: 08/07/2019</b>
<input type="checkbox"/>	Changes in the PDD	Section(s):	New version No.:	
<input checked="" type="checkbox"/>	Changes in MR	Section(s): D.2	New version No.: 2.0	
<input type="checkbox"/>	Changes in XLS	Worksheet(s):	New version No.:	
<input type="checkbox"/>	Other:			
<b>DOE assessment (1<sup>st</sup> round)</b>				<b>Date: 16/07/2019</b>
MR Version 2.0, Section D.2				
Numbers have been updated consistent with the MP5 evidences				
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed			

<b>CAR ID</b>	<b>07</b>	<b>Section no.</b>	<b>D.3</b>	<b>Date: 24/06/2019</b>
<b>Description of CAR</b>				
MR Version 1.0, Section D.3				
Sampling approach: -				
1. HHFF Sample frame tab: Both columns O & P show dates instead of telephone contacts and installation dates respectively. Therefore, it is not possible to isolate/verify the age groups as per the prescribed GS sampling requirements  2. It is stated that the sample frame for HHFF increased from 185 to 250. However, this is not consistent with the provided sample frame in the excel tab. Excel tab is still only 185  3. The PP shall clarify whether filters from different age groups have been selected and at least 30 samples of each age group being interviewed according to the applied methodology. For BSF, it appears that 2009 is only 28, for HHFF specifically years 2013, 2014 and 2015 have 22 and 18 and 26 respectively				
<b>Project participant response (1<sup>st</sup> round)</b>				

- Both columns O & P have been amended to show the correct information.
- PD would like to clarify that there is a separate tab labelled 'replacements tab' which indicates the number of households originally selected on the sample frame of 185. Out of 185 selected, 66 were not available while others were not reachable through the phone. PD hence opted to replace them. Out of 66 replaced, only 64 were surveyed and no further replacements were done since the minimum sample size of 30 per age had been attained. Total sample increased to 249, PD has made corrections on the MR. Replacement tab is indicated separately so as to avoid confusion.
- PP would like to confirm that a minimum sample size for each age group has been attained as follows:

### BSF

Age	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	Total
Total Population	180	445	946	630	320	104	155	81	57	20	2,938
Sample size selected	60	60	60	60	60	60	60	60	57	20	557
Actual samples done	34	32	31	31	35	31	30	33	33	20	310

### HHFF

Age	13/14	14/15	15/16	16/17	17/18	18/19	Total
Total Population	110	181	367	217	524	20	1,419
Sample size	33	32	33	33	32	20	185

### IHFF

Age	14/15	15/16	16/17	17/18	18/19	Total
Total Population	33	15	18	20	12	94
Sample size	33	15	18	20	12	94

Documentation provided by project participant (1 <sup>st</sup> round)		Date: 08/07/2019
<input type="checkbox"/> Changes in the PDD	Section(s):	New version No.:
<input checked="" type="checkbox"/> Changes in MR	Section(s): D.3	New version No.: 2.0
<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<input type="checkbox"/> Other:		

DOE assessment (1 <sup>st</sup> round)	Date: 16/07/2019
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MR Version 2.0, Section D.3

- Columns O & P have been revised to clearly show the user contacts on one hand, and dates on the other
- The sample size n is clarified as 249 and demonstrated accordingly per each age group
- Recommended minimum sample size (n) for each age group has been attained

Conclusion	
<i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open)
	<input checked="" type="checkbox"/> The finding is closed

CAR ID	08	Section no.	E.1 & XLS	Date: 24/06/2019
Description of CAR				

**Baseline Emissions HHFF filters:**

1. Some sample dates checked between column N and O did not match especially for dates before December 2018, yet they are supposed to be the same. Column N was applied in emission reductions. Therefore, it appears that the wrong dates were used in emission reduction estimations, as well as selection of age groups especially for  $U_{p,y}$  could have been affected due to the automatic formatting to American system. The PP shall address these issues in their entirety

**Baseline Emissions IHFF filters:**

1. The  $W_{b,y}$  value of 0.0005496 tons indicated for IHFF filters is incorrect
2. The calculated values of 213 tCO<sub>2</sub>e (2018) and 30 tCO<sub>2</sub>e (2019) are not traceable from the 0.00018 tCO<sub>2</sub>e baseline emissions/person/day
3. The PP shall also clarify how the daily average number of persons ( $N_j$ ) using the water purification systems (IHFF) is determined for commercial operations such as hotels or Saccos
4. Some institutions had more than one filter. Please clarify the same is not accounted for in the baseline calculations
5. Some institutions are applying 365 days in the VER calculations; such as Offices, churches, and saccos. An example visited is the Wakenya Sacco which is clearly a bank office, and the Lwala Community Alliance which might not operate during weekends. Clarify or correct this approach in the VER calculations

**Project participant response (1<sup>st</sup> round)**

**Baseline Emissions HHFF filters:**

1. Dates between column N and O did not match as column O indicates the actual dates as per the receipt. Some of the filters had correct dates indicated and correct ER calculations done, however, there are a few filters where a formatting error for the dates occurred, where instead of writing month, date, year, the PD wrote date, month year, and hence when auto formatting was used for the computer, wrong dates were used. This was also evidenced during DOE site visit where the issue of dates was not occurring for all filters.

PD has corrected this dates using the receipts which they have, which will also be an ongoing process moving forward, and ERs have been recalculated using the correct dates. The dates corrected are on highlighted in Yellow on the TSR labelled HHFF TSR & Sample Frame- DOE and IHFF TSR & Sample Frame. Since monitoring survey exercise was already concluded, the sample frame has not been tampered with, only ER calculations have been amended to calculate actual days that the filters have been in operation.

ERs for HHFF have been amended where HHFF have increased from 6,891 to 6,898 whereas IHFF have reduced from 229 to 222. Amended ERs have been given as a support document. For this, PD would like to request that this be raised as an FAR since there is no significance change in ERs and sample selection was already completed and it would be a challenge to repeat the monitoring survey exercise due to the issue of dates.

**Baseline Emissions IHFF filters:**

1. Wb,y amended to 5.44tons
2. PD linked tab BE-person day IHFF with ER calculations tab, where individual baseline emissions for each institution have been calculated. Total VERs for the year were 243, however for the PD to determined how many ERs are claimed in 2018 and 2019, 243 was divided for the number of months in each yr. Stepwise calculations of how this figures are attained are in Combined ER and MSS excel sheet tab ER calculations IHFF.
3. During monitoring surveys, the enumerators asks the average number of persons that use the filter, e.g hotels. This is the figure records and used to calculate the emission reductions.
4. Number of filters in an institution depends on the population. During baseline survey, they were boiling more water hence in some institutions having many people, only one buying 1 filter would be boiling some water to compensate for the difference. This is unlike the households where population is low, and one filter is enough.
5. PD has made amendments using assumptions for operational days as follows:  
Offices, Mon-Fri, an year has 53 Sundays hence  $365-53= 312$

Hospital e.g Lwala Community Alliance and hotels = 365

Churches (there are many operations that happen during the week, PD has opted for a conservative value of 3 days per week) =  $52 \text{ weeks} * 3 = 156$  days in an year

University= 365

Kisii University VC's office= 159 (365-53 Sundays and 53 Saturdays).

Documentation provided by project participant (1 <sup>st</sup> round)		Date: 08/07/2019
<input type="checkbox"/> Changes in the PDD	Section(s):	New version No.:
<input checked="" type="checkbox"/> Changes in MR	Section(s): E	New version No.: 2.0
<input checked="" type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.: 2.0
<input type="checkbox"/> Other:		
DOE assessment (1 <sup>st</sup> round)		Date: 16/07/2019

MR Version 2.0, Section E	
<b>Baseline Emissions HHFF filters:</b>	
It has now been confirmed that sampling was before the dates were affected and therefore the sample frame remains correct. The ER calculations have been updated accordingly.	
<b>Baseline Emissions IHFF filters:</b>	
<ol style="list-style-type: none"> <li>1. Fixed value <math>W_{b,y}</math> has been corrected to 5.44 tons and consistent with the spreadsheet application</li> <li>2. OK. The calculation is now corrected and linked and traceable. However, the values are not updated in the latest MR section E.1 and the VER table</li> <li>3. The <math>N_{j,y}</math> is determined through survey questionnaires. The ER calculations tab shall be revised to define the same as an average value</li> <li>4. Filters bought depending on need of the served population. Therefore, this is included in the number of people applied in the determination of <math>N_{j,y}</math> and has no impact on the project baseline</li> <li>5. The assumptions are sufficiently explained. Nonetheless, please clarify how universities operate for 365 days in a year.</li> </ol>	
<b>Project participant response (2nd round)</b>	
<ol style="list-style-type: none"> <li>2. Values are now updated on MR.</li> <li>3. ER calculations tab revised and parameter <math>N_{j,y}</math> indicated as an average value.</li> <li>5. PD would like to clarify that in universities, it is not only students who use the filter, but administrative staff and support staff as well. Therefore, it is very unlikely to find completely no one in higher institutions of learning. PD has thus used 365 days for that particular filter in Kisii which is used by all.</li> </ol>	
<b>Documentation provided by project participant (1<sup>st</sup> round)</b>	
<input type="checkbox"/> Changes in the PDD	Section(s): New version No.:
<input checked="" type="checkbox"/> Changes in MR	Section(s): E New version No.: 3.0
<input checked="" type="checkbox"/> Changes in XLS	Worksheet(s): New version No.: 3.0
<input type="checkbox"/> Other:	
<b>DOE assessment (2nd round)</b>	
Date: 22/07/2019	
MR Version 3.0, Section E	
<ol style="list-style-type: none"> <li>2. Values for both vintages and total have been updated and consistent with latest spreadsheet</li> <li>3. <math>N_{j,y}</math> has been revised accordingly</li> <li>5. Universities stay open throughout and units are used mainly by auxiliary staff</li> </ol>	
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

**Table 4. FAR from this verification**

<b>FAR ID</b>	<b>01</b>	<b>Section No.</b>	<b>Date: 24/06/2019</b>
<b>Description of FAR</b>			
IHFF forms are filed together with all the others – BSR and HHFF. This makes DOE auditing problematic. The same is raised for correction as a FAR			
<b>Project participant response</b>			<b>Date: DD/MM/YYYY</b>
On filing, direct sales are filed together to determine direct sales from our staff, we have a different file for institutional filters sold under school WASH program. PP is working on changing the filling system where receipts will be organized based on filter technology.			
<b>Documentation provided by project participant</b>			
<input type="checkbox"/> Changes in the PDD	Section(s):		New version No.:
<input type="checkbox"/> Changes in MR	Section(s):		New version No.:
<input type="checkbox"/> Changes in XLS	Worksheet(s):		New version No.:
<input type="checkbox"/> Other:			
<b>DOE assessment</b>			<b>Date: DD/MM/YYYY</b>
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>			
<input checked="" type="checkbox"/> To be checked during the next periodic verification			

<b>FAR ID</b>	<b>02</b>	<b>Section No.</b>		<b>Date: 24/06/2019</b>
<b>Description of FAR</b>				
After data is entered in soft copy by a senior monitoring and evaluation officer. As part of the QA/QC procedures, the PP is requested to ensure that follow-up sample checks for any errors are carried out				
<b>Project participant response</b>				<b>Date: DD/MM/YYYY</b>
PD has put in place following observation from DOE to have data checked on a monthly basis by sales manager and quarterly by the top management on a sample basis.				
<b>Documentation provided by project participant</b>				
<input type="checkbox"/>	Changes in the PDD	Section(s):		New version No.:
<input type="checkbox"/>	Changes in MR	Section(s):		New version No.:
<input type="checkbox"/>	Changes in XLS	Worksheet(s):		New version No.:
<input type="checkbox"/>	Other:			
<b>DOE assessment</b>				<b>Date: DD/MM/YYYY</b>
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>		<input checked="" type="checkbox"/> To be checked during the next periodic verification		