

VALIDATION REPORT

for

Gold Standard Project Activity

Aqua Clara Foundation

Aqua Clara Water Filtration Program in Kenya

In

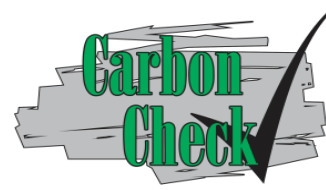
Republic of Kenya

Report No: CCL0138/ACWPP/22022012

Revision number: 03

Report Date: 20/02/2014

Carbon Check (Pty) Ltd.
Block-A, Ground Floor
374 Rivonia Boulevard
Rivonia, Johannesburg
Republic of South Africa 2128



I. PROJECT DATA

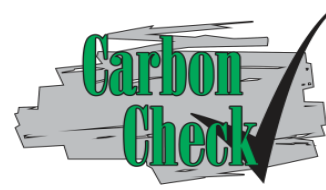
Project title:	Aqua Clara Water Filtration Program in Kenya		
Host party:	Republic of Kenya		
Project location:	Republic of Kenya		
Methodology:	Technologies and Practices to Displace Decentralized Thermal Energy Consumption (Version 1.0 – Date: 11/04/2011)		
Sectoral Scope/Technical Area	1 (1.1), 3 (3.1), 13 (13.1)	Scale:	<input checked="" type="checkbox"/> Large Scale <input type="checkbox"/> Small Scale
GSC commenting period:	20/09/2011 – 20/11/2011		
Final PDD:	Version 14, Date: 19/02/2014		
Average emission reductions:	Estimated: 1,21,896 tCO ₂ e/yr		
GHG reducing measure/technology:	The project involves the distribution of ACF Bio Sand Filter (BSF) and the Sand and Membrane (SAM) (household as well as community based) filters that reduce the use of non-renewable biomass for water boiling. The project avoids GHG emissions caused by the combustion of non-renewable biomass.		

Party	Project participants	Party considered a project participant	Contract party
Republic of Kenya (Host)	Aqua Clara Foundation	No	<input checked="" type="checkbox"/>

II. VALIDATION TEAM (compliance of § 148e of VVS)

Validation Team			Role									
Full name	Affiliation	Appointed for Sectoral Scopes (Technical Areas)	Team leader	Acting/trainee Team Leader	Local Expert	Team Member (Auditor)	Technical Expert	Acting/Trainee Tech. Expert	Trainee Auditor	Technical Reviewer	Expert to TR	Trainee TR
Ravi Shankar (until 15/01/2013)	RSA	1.2, 2.1, 2.2, 3.1, 13.1	X									
Amit Anand (from 16/01/2013)	RSA	1.2, 13.1	X									
Barun Kumar	RSA	1.2, 13.1				X						
R. V. Nesari	RSA	1.1, 3.1, 4, 5.1					X					
Stephanie Crichton ¹	Chile	1.2, 13.2				X						
Adam Simcock	RSA	--			X							
Pankaj Kumar	RSA	1.1, 1.2, 3.1, 4.5, 13.1								X		

¹ GS Fast Track Auditor
FM 4.9 Validation Report Template Gold Standard




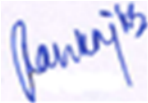
III. VALIDATION REPORT

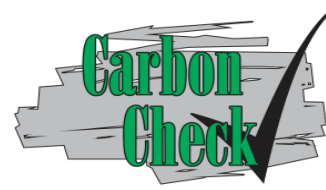
Validation Phases and Status:

Desk Review Follow up interviews, On Site Assessment

Resolution of outstanding issues Corrective Actions / Clarifications Requested

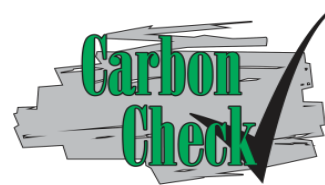
Full Approval and Submission for registration Rejected

Final Approval Date	Approval	Distribution
2014-02-25	Priyesh Ramlall (Final Approval) 	<input checked="" type="checkbox"/> No distribution without permission from the Client or responsible organizational unit <input type="checkbox"/> Limited Distribution <input type="checkbox"/> Unrestricted distribution
2014-02-25	Pankaj Kumar (Technical Reviewer) 	



Abbreviations

BAU	Business As Usual
BFT	Baseline Performance Field Test
BS	Baseline Survey
BWBT	Baseline Water Boiling Test
CAR	Corrective Action Request
CCL	Carbon Check (Pty) Ltd.
CDM	Clean Development Mechanism
CL	Clarification Request
CO₂	Carbon Dioxide
CO_{2e}	Carbon Dioxide Equivalent
DOE	Designated Operational Entities
DVR	Draft Validation Report
EF	Emission Factor
FA	Final Approval
FAR	Forward Action Request
FVR	Final validation Report
GS	Gold Standard
GSC	Global Stakeholder Consultation
GS-TAC	Gold Standard Technical Advisory Committee
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
NRB	Non Renewable Biomass
NGO	Non-governmental Organization
OSV	On Site Visit
QC/QA	Quality control/Quality assurance
Registry	Gold Standard/Markit Registry
TA	Technical Area
TR	Technical Review
UNFCCC	United Nations Framework Convention on Climate Change
VER	Verified Emission Reduction
WCFT	Water Consumption Field Test



Validation Opinion

The validation team assigned by the DOE (Carbon Check (Pty) Ltd, here after referred as CCL, has been assigned by “Aqua Clara Foundation” to perform the validation of their project “Aqua Clara Water Filtration Program in Kenya”. The validation was performed on the basis of Gold Standard Requirements and applicable UNFCCC criteria for the Clean Development Mechanism. The scope of the validation is defined as an independent and objective review of the project design document, the project’s baseline establishment and monitoring plan and other relevant documents. The information in these documents is reviewed against Gold Standard Requirements version 2.1 dated 01/07/2009 and Gold Standard Toolkit version 2.1 dated 01/06/2009 and relevant CDM Validation and Verification Standard (Version 05.0), Kyoto Protocol requirements, CDM M & P and subsequent decisions and guidance by the COP/MOP and CDM Executive Board and Gold Standard Secretariat.

The report is based on the assessment of the project design document undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to document reviews, site visit, and stakeholder interviews, review of the applicable/applied methodology and its underlying formulae and calculations.

The Validation team confirms the contractual relationship signed on the 22/02/2012 between the DOE, Carbon Check (Pty) Ltd and the Project Participant, Aqua Clara Foundation. The team assigned to the verification meets the Carbon Check (Pty) Ltd internal procedures including the UNFCCC requirements for the team composition and competence. The validation team has conducted a thorough contract review as per UNFCCC and Carbon Check procedures and requirements.

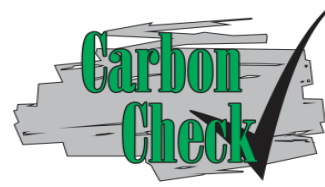
The objective of the Aqua Clara Water Filtration Program in Kenya is to distribute Aqua Clara Foundation’s flagship products i.e., the ACF Bio Sand Filter (BSF) and the Sand and Membrane (SAM) large-scale filter to households throughout Kenya in order to replace firewood fuel traditionally used to boil water for domestic consumption and in the alternative offer an affordable, long-term solution for households that typically consume raw water from turbid sources. As a result, the project results in reductions of CO₂ emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the project is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity in accordance with the Gold Standard requirements for additionality.

The project meets all relevant host country criteria and Gold Standard requirements.

The project correctly applies the Gold Standard baseline and monitoring methodology; “Technologies and Practices to Displace Decentralized Thermal Energy Consumption (Version 1.0 – Date: 11/04/2011)”.

The total emission reductions from the project are estimated to be 13, 40, 856 tCO₂e over a 10 year crediting period during 01/02/2012 to 31/01/2022, averaging 1, 21, 896 tCO₂e annually. The emission reduction forecast has been checked and it is deemed likely that the stated amount shall be achieved given the underlying assumptions do not change. The project results in reductions of a total of 13, 40, 856 tCO₂e emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the project is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity.

The PDD /02/ contains monitoring plan for the monitoring of the emission reductions from the project. The monitoring arrangements described in the monitoring plan are feasible within the project design and it is CCL’s opinion that the project participants are able to implement the monitoring plan.



The validation is based on the information made available to us and the engagement conditions detailed in this report. The only purpose of this report is its use during the registration process as a GS-VER project. Hence, Carbon Check cannot be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

The validation protocol describes a total of 33 findings, which include:

- 12 Corrective Action Requests (CARs);
- 17 Clarification Requests (CLs);
- 4 Forward Action Requests (FARs);

All findings have been closed satisfactorily. FAR(s) shall be checked during the 1st periodic verification of the project.

Carbon Check (Pty) Ltd concludes the validation with a positive opinion that the Project Activity “Aqua Clara Water Filtration Program in Kenya” in Republic of Kenya, as described in the PDD (version 14, dated 19/02/2014) /02/, meets all applicable GS requirements and therefore recommends the project for the Gold Standard Registry for registration.

2014-02-25
Priyesh Ramlall
Final Approver
Carbon Check (Pty) Ltd

2014-02-25
Pankaj Kumar
Technical Reviewer
Carbon Check (Pty) Ltd

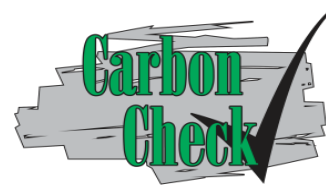
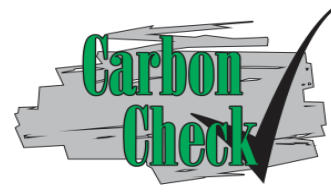


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1. INTRODUCTION

The Project Participant Aqua Clara Foundation has commissioned the Carbon Check (Pty) Ltd. to perform an independent validation of the Project Activity “Aqua Clara Water Filtration Program in Kenya” in Republic of Kenya (hereafter referred to as “project activity”). This report summarises the findings of the validation of the project, performed on the basis of relevant Gold Standard requirements and applicable UNFCCC guidance. As well as criteria given to provide for consistent project operations, monitoring and reporting and compliance with host country criteria and Gold Standard specific criteria. This report contains the findings and resolutions from the validation and a validation opinion thus confirming the project design as document is sound and reasonable and meets the stated requirements and identified criteria.

1.1 Objective

The purpose of a validation is to have a thorough and independent assessment of the proposed project activity against the applicable CDM requirements, in particular, the project's baseline, monitoring plan and the project's compliance with relevant UNFCCC and Gold Standard requirements and host Party criteria. Gold Standard specific conditions are also validated to confirm that the project design (as documented) is complete, reasonable and meets the stated requirements and identified criteria. Validation is seen as necessary to provide assurance to stakeholders about the quality of the project and its proposed generation of Verified Emission Reduction (VER).

1.2 Scope

The validation scope is defined as an independent and objective review of the project design document (PDD). The PDD is reviewed against the relevant Gold Standard criteria and applicable decisions by the CDM Executive Board, including the approved baseline and monitoring methodology. The validation team has, based on the recommendations in the Validation and Verification Standard and Gold Standard Toolkit employed a rule-based approach, focusing on the identification of significant risks for project implementation and the generation of VERs.

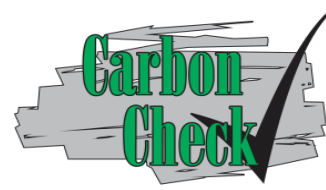
The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

While carrying out the validation, CCL determines if the project activity complies with the requirements Gold Standard, specifically the applicability conditions of the selected methodology and also assesses the claims and assumptions made in the PDD without limitation on the information provided by the project participants.

2. METHODOLOGY

The validation consists of the following four phases:

- I A desk review of the project design documents
 - A review of data and information;
 - Cross checks between information provided in PDD/Passport and information from sources with all necessary means without limitations to the information provided by the project proponent;
 - The PDD version 01 dated 11/01/2012 and Passport version 01 dated 10/03/2012 were uploaded to the Gold Standard Registry by the PP on 19/03/2012
- II On-site visit and follow-up interviews with project stakeholders
 - The DOE uploaded the validation work plan to the Gold Standard registry on 27/08/2013.



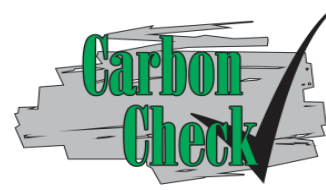
- Interviews with relevant stakeholders in host country with personnel's having knowledge with the project development via telephone, email or direct on-site visits;
 - Cross checking between information provided by interviewed personnel with all necessary means without limitations to the information provided by the project proponent;
- III Reference to available information's relating to projects or technologies similar projects under validation and review based on the approved methodology being applied of the appropriateness of formulae and accuracy of calculations.
- IV The resolution of outstanding issues and issuance of the final validation report (opinion).

The following sections outline each step in more detail.

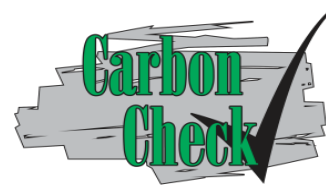
2.1 Desk review (compliance of § 21 of VVS)

The following table outlines the documentation reviewed during the validation:

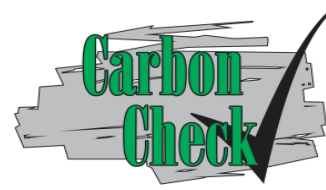
Ref No.	Reference Document
/01/	Webhosted PDD: Aqua Clara Water Filtration Program in Kenya (Version 01; Dated 11/01/2011)
/02/	Final PDD: Aqua Clara Water Filtration Program in Kenya (Version 14; Dated 19/02/2014)
/03/	Emission reduction spread sheet corresponding to /01/
/04/	Emission reduction spread sheet corresponding to /02/
/05/	<ol style="list-style-type: none"> 1. Gold Standard Passport for "Aqua Clara Water Filtration Program in Kenya" (Dated 10/03/2012) 2. Gold Standard Passport for "Aqua Clara Water Filtration Program in Kenya" (Version 06; Dated 18/02/2014)
/06/	ACF Fast Track Validation checklist submitted to GS (Dated 03/07/2013)
/07/	Aqua Clara Foundation: ODA Declaration (Dated 10/03/2012)
/08/	Validation contract between the Aqua Clara Foundation and Carbon Check Limited (Dated 22/02/2012)
/09/	Centre for Affordable Water and Sanitation Technology (CAWST): Fact Sheet 3.2 Concrete Biosand Filter http://www.cawst.org/assets/File/HWTS_Fact_Sheet_Concrete_BSF.pdf
/10/	Gold Standard Local Stakeholder Consultation report for "Aqua Clara Water Filtration Program in Kenya" (Dated 02/01/2012)
/11/	Certificate of Incorporation of Aqua Clara Foundation (Dated 28/07/2005)
/12/	Development Co-operation Directorate (DCD-DAC), Organisation for Economic Co-operation and Development (OECD): " List of ODA recipients (effective for reporting on 2012 and 2013 flows)" http://www.oecd.org/dac/stats/DAC%20List%20used%20for%202012%20and%202013%20flows.pdf
/13/	Declaration on double counting: <ol style="list-style-type: none"> a) Aqua Clara Foundation: Letter confirming exclusive inclusion of Sand and Membrane (SAM) Filters in Aqua Clara Water Filtration Program in Kenya GS 1078 (Dated 13/01/2013) b) Aqua Clara Foundation: Letter confirming exclusive inclusion of Bio Sand Filters (BSF) in Aqua Clara Water Filtration Program in Kenya GS 1078 (Dated 14/03/2013)
/14/	<ol style="list-style-type: none"> a) Aqua Clara Foundation: Letter confirming distribution schedule For BSF, SAM (household and community) units (Dated 10/02/2014) b) Aqua Clara Foundation: Distribution schedule For BSF, SAM (household and community) units excel sheet titled "Distribution Schedule.xlsx"



/15/	Mail titled "Clarification Request to the Gold Standard TAC" from Ms. Heba Rabie, Regional Manager – Middle East and Africa, The Gold Standard Foundation (Dated 26/06/2012)
/16/	Product information sheets: a) How to use your Aqua Clara Water Filter b) How Aqua Clara Water Filter Works
/17/	Viability Africa: Kitchen Survey test results (Kitchen Survey Results_VA_Jan 3 2012.xlsx)
/18/	Viability Africa: Paired sample surveys questionnaire (Water Boiling Test and Kitchen Survey)
/19/	Nairobi City Water and Sewerage Company Limited: a) Report on bacteriological examination of water – Raw (Ref. No.: R/72/12); Dated 31/05/2012 b) Report on bacteriological examination of water – Filtered (SAM filters) (Ref. No.: R/71/12); Dated 31/05/2012
/20/	Central Water testing Laboratories, Ministry of Water and Irrigation, Republic of Kenya: a) Report on bacteriological examination of water from Kasarini River, Kiambu – Raw (Dated 16/03/2007). b) Report on bacteriological examination of water from Kasarini River, Kiambu – Filtered (BSF Filters) (Dated 16/03/2007)
/21/	Viability Africa: Water Boiling Test result (Water boiling test Results_Jan 3 2011.xlsx)
/22/	Aqua Clara Foundation: Training agenda for 5 days Community Development Officers Training workshop (Dated 02/04/2011)
/23/	Verified Emission Reduction Purchase Agreement between AquaClara Foundation and ClimateCare Limited (Dated 13/12/2011)
/24/	Aqua Clara International: a) Financial statements (Year ended December 31, 2010 and 2009) b) Financial statements (Year ended December 31, 2011 and 2010) c) Financial statements (Year ended December 31, 2012 and 2011)
/25/	Aqua Clara International: Community Development Officer (CDO) Manual (Edition 1; Dated March 2011)
/26/	Aqua Clara International: Training Certificate for: a) Charles Makori Bonuke (Dated 01/04/2011) b) Olpha Magoma Onwonga (Dated 01/04/2011)
/27/	Environment Management and Co-ordination Act (Act No. 8 of 1999), Republic of Kenya
/28/	Memorandum of Understanding between The Gold Standard Foundation and Viability Africa, LLC with regards to Fast tracking for GSv2.1 retroactive project activities - Aqua Clara Water Filtration Program in Kenya GS1078 (Dated 17/06/2013).
/29/	Duly signed agreement for waiver of rights to carbon credits between Aqua Clara International and the end users.
/30/	Kenya Clean Water Project: http://www.nativeenergy.com/461
/31/	World Health Organization: Domestic Water Quantity, Service, Level and Health (2003) http://www.who.int/water_sanitation_health/diseases/WSH03.02.pdf
/32/	Centre for Economic and Social Rights (CESR): Kenya Fact Sheet http://www.cesr.org/downloads/Kenya%20Fact%20Sheet.pdf
/33/	Appropriate water treatment for the Nyanza province of Kenya– A Master of Engineering in Civil and Environmental Engineering thesis by Pragnya Y. Alekal presented to Massachusetts Institute Of Technology (June 2005) http://web.mit.edu/watsan/Docs/Student%20Theses/Kenya/PragnyaAlekal-Thesis%205-18-05.pdf

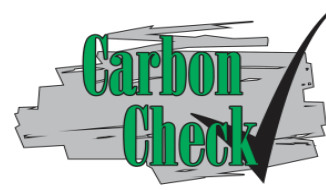


/34/	United Nations Environment Programme: http://www.unep.org/dewa/africa/kenyaatlas/PDF/KenyaAtlas_Chapter2.pdf
/35/	International Journal of Environmental Research and Public Health (2010): Article titled "Determinants of Use of Household-level Water Chlorination Products in Rural Kenya, 2003–2005"; Dated 25/10/2010 http://www.mdpi.com/1660-4601/7/10/3842/pdf
/36/	Biofiltration as an Air Pollution Control Technology for the Removal of Volatile Organic Compounds by Ramarao V and Sridharan R; Department of Chemical Engineering, IIT Roorkee http://www.scribd.com/doc/49833275/Biofiltration-as-an-Air-Pollution-Control-Technology-for-the-Removal-of
/37/	Membrane Filter white paper: http://aquaclara.org/wp-content/uploads/2011/04/ACI-MEMBRANE-PROGRAM-AN-OVERVIEW.pdf
/38/	Export Processing Zones Authority, Kenya http://www.epzakenya.com/index.php/sector-profiles.html
/39/	Practical Action: Biomass Energy Use In Kenya (October 2010) prepared for International Institute for Environment and Development (IIED) http://pubs.iied.org/pdfs/G02985.pdf
/40/	GTZ 1999: Micro- and Macroeconomic Benefits of Household Energy Conservation Measures in Rural Areas of Kenya by Helga Habermehl Eschborn, 1994
/41/	Spring Cleaning: A Randomized Evaluation of Source Water Quality Improvement http://documents.apec.umn.edu/miguel%20paper.pdf
/42/	Centre for Disease Control And Prevention: Safe Water System (SWS) - Where Has the SWS Been Used? – Kenya http://www.cdc.gov/safewater/where_pages/where_kenya.htm
/43/	Household Water Treatment: Flocculants / Disinfectant Powder http://www.cdc.gov/safewater/PDF/PUR_2011-final.pdf
/44/	Features of Hydraid® Bio Sand Water Filter: http://hydraid.org/features
/45/	Default values of fraction of non-renewable biomass http://cdm.unfccc.int/DNA/fNRB/index.html
/46/	Practical Action: Gender and Equity in Bioenergy Access and Delivery in Kenya study for the PISCES RPC (April 2008): http://practicalaction.org/page/docs/consulting/pisces/gender-and-equity-in-bioenergy-kenya.pdf
/47/	Household Energy Network (HEDON): Kenya: Household Energy Demand and Use http://www.hedon.info/KenyaCountrySynthesis
/48/	Determining Sample Size by Glenn D. Israel: Fact Sheet PEOD-6, a series of the Program Evaluation and Organizational Development, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: November 1992. http://www.soc.uoc.gr/socmedia/papageo/metaptyxiakoi/sample_size/samplesize1.pdf
/49/	Aqua Clara Foundation: Attendance register for Local Stakeholder Consultation meeting (Dated 07/05/2011)
/50/	Aqua Clara International: Purchase receipt for Bio Sand Filters, No.: 11201 (Dated 26/06/2009)
/51/	Aqua Clara International: Total sales Record (TSR) excel sheet titled "Total Sales record Version 2_VA_July282011.xlsx"
/52/	Aqua Clara Foundation: Baseline Surveys and Water Boiling Tests Report
/53/	Gold Standard Foundation: Email from Johann Thaler (Technical Expert-African portfolio) regarding monitoring of SD indicators for retroactive period (Dated 30/09/2013).



/54/	ACF: Monitoring Survey Template.
/55/	Gold Standard Foundation: Email from Heba Rabie (Regional Manager- Middle East and Africa) regarding clarification on thermal output of the baseline technology for applicability of methodology (Dated 26/06/2012).
/56/	Kenya Demographic and Health Survey 2008-09 by Kenya National Bureau of Statistics Nairobi, Kenya published in June 2010 (Table 2.6) http://www.measuredhs.com/pubs/pdf/FR229/FR229.pdf
/57/	Mail titled "GS1078 - Registration Review feedback" from Mr Johann Thaler, Regional Manager Africa, The Gold Standard Foundation (Dated 01/02/2014)
/58/	Automated Outlier test.xlsx
/59/	Aqua Clara International: Memorandum of Aqua Clara Board Meeting (Dated 27/04/2009)
/60/	Aqua Clara International: Minutes of Meeting of Board of Directors of Aqua Clara (dated 10/09/2010)
/61/	Aqua Clara International: Letter titled "Carbon Credit Contract" from Mr. Harry J. Knopke (President, Aqua Clara) to Nathan Gachugi (Project Manager, Viability Africa) (Dated 09/03/2011)
/62/	Viability Africa: Contract for Professional Services (Dated 23/03/2011) signed between Aqua Clara Foundation and Viability Africa, LLC
/63/	Mail from Ms. Heba Rabie, Regional Manager – Middle East and Africa, The Gold Standard Foundation (Dated 03/01/2012) confirming that GS1078 is now Listed on the GS registry.
/64/	Mail from Mr. Nathan Gachugi, Project Manager – Viability Africa to Gold Standard Foundation (Dated 11/11/2013) requesting registration for project activity GS1078
/65/	Tests to identify outliers in data series by Francisco Augusto Alcaraz Garcia http://habcam.who.edu/HabCamData/HAB/processed/Outlier%20Methods_external.pdf
/66/	A Review and Comparison of Methods for Detecting Outliers in Univariate Data Sets – A Master of Science thesis by Songwon Seo Submitted to the Graduate Faculty of Graduate School of Public Health, University of Pittsburgh (2006) http://d-scholarship.pitt.edu/7948/1/Seo.pdf
/67/	Detection and Accommodation of Outliers in Normally Distributed Data Sets by Agata Fallon and Christine Spada http://www.webapps.cee.vt.edu/ewr/environmental/teach/smprimer/outlier/outlier.html

/B01/	GS Methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption" (Version 1.0; Dated 11/04/2011)
/B02/	GS Requirements (Version 2.1; Dated 01/07/2009)
/B03/	The Gold Standard Toolkit (Version 2.1; Dated 01/06/2009)
/B04/	GS Annex C – Guidance on Project Type Eligibility (Version 2.1; Dated 01/07/2009)
/B05/	GS Annex G – Guidance on Demonstration of Additionality (Version 2.1; Dated 01/07/2009)
/B06/	GS Annex H – H. Guiding Questions for 'do-no-harm' Assessment (Version 2.1; Dated 01/07/2009)
/B07/	GS Annex I – Guidance on Sustainability Assessment (Version 2.1; Dated 01/07/2009)
/B08/	GS Annex J – Guidance on Stakeholder Consultation (Version 2.1; Dated 01/07/2009)
/B09/	GS Annex K – Outline for Validation / Verification Reports (Version 2.1; Dated 01/07/2009)



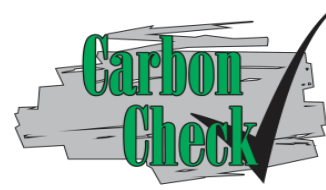
/B10/	GS Annex D – ODA Declaration Form (Version 2.1; Dated 01/07/2009)
/B11/	GS Annex Q – LSC Report Template (Version 2.1; Dated 01/07/2009)
/B12/	GS Annex R – Passport Template (Version 2.1; Dated 01/07/2009)
/B13/	GS Annex AB – LSC Checklist for DOEs (Version 2.2; Dated 01/06/2012)
/B14/	GS Annex P – Fast track options for retroactive projects (Version 2.2; Dated 01/06/2012)
/B15/	Tool for the demonstration and assessment of additionality (Version 07.0.0; Annex 08, EB 70)
/B16/	The Water Boiling Test (Version 3.0; Dated 01/2007) http://ehs.sph.berkeley.edu/hem/content/WBT_Version_3.0_Jan2007a.pdf
/B17/	Gold Standard Foundation: http://www.cdmgoldstandard.org
/B18/	Markit Environmental Registry: 1. http://www.markit.com/sites/en/products/environmental/markit-environmental-registry-public-view.page 2. https://products.markit.com/home/index.jsp#REGISTRY.ProjectIssuance.ProjectIssuance
/B19/	Wikipedia: http://en.wikipedia.org
/B20/	Google Earth: http://www.google.com/earth/
/B21/	World Health Organization: http://www.who.int
/B22/	Centre for Economic and Social Rights (CESR): http://www.cesr.org
/B23/	United Nations Environment Programme: http://www.unep.org
/B24/	Aqua Clara International: http://aquaclara.org
/B25/	Export Processing Zones Authority, Kenya: http://www.epzakenya.com
/B26/	Hydraid® Bio Sand Water Filter: http://hydraid.org
/B27/	Intergovernmental Panel on Climate Change (IPCC): www.ipcc.ch
/B28/	United Nations Framework Convention on Climate Change: www.unfccc.int
/B29/	Household Energy Network (HEDON): Kenya: http://www.hedon.info
/B30/	Validation and Verification Standard (version 05.0)
/B31/	IPCC Fourth Assessment Report: Climate Change 2007 http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html

2.2 On-site visit and follow-up interviews with project stakeholders

An OSV was performed by members of the validation team of Carbon Check from 27/04/2012 – 28/04/2012 at Nairobi, where project representatives and stakeholders were interviewed the aims were as follows:

	Name	Organization	Topic
/i/	Kyle Denning	Viability Africa	<ul style="list-style-type: none"> • Sustainable Development in the Region • Project Start Date • Benefits planned for the villages • Local employment • Environmental Management • Types of cook stoves used • Stakeholder meeting • Feedback round
/ii/	Sam Simmons	Aqua Clara Foundation	<ul style="list-style-type: none"> • Baseline Calculations • Sustainable Development • Operations and location • Sampling methodology

			<ul style="list-style-type: none"> • adopted • Sampling size • Survey check • QA/QC • Analysis of results • Purpose and intention of project • Funding mechanism • Distribution mechanism
<i>/iii/</i>	Isaac Soita	Aqua Clara Foundation	<ul style="list-style-type: none"> • Baseline Calculations • Sustainable Development • Operations and location • Sampling methodology • adopted • Sampling size • Survey check • QA/QC • Analysis of results • Purpose and intention of project • Funding mechanism • Distribution mechanism
<i>/iv/</i>	Nathan Gachugi	Viability Africa	<ul style="list-style-type: none"> • Baseline Calculations • Sustainable Development • Operations and location • Sampling methodology • adopted • Sampling size • Survey check • QA/QC • Analysis of results • Purpose and intention of project • Funding mechanism • Distribution mechanism
<i>/v/</i>	Festus Mumyasia	Local Stakeholders	<ul style="list-style-type: none"> • Onsite inspection and Interview • Distribution scheme and funding • Carbon waiver rights • Sustainable development • Livelihood improvement • Employment opportunities • Improvement to air quality, • Improvement and access to cleaner energy and water sources; • Roles and responsibility of CME
<i>/vi/</i>	Ernest Nitei	Local Stakeholder (end user)	<ul style="list-style-type: none"> • Onsite inspection and Interview • Distribution scheme and funding • Carbon waiver rights • Sustainable development • Livelihood improvement • Employment opportunities • Improvement to air quality, • Improvement and access to cleaner energy and water sources; • Roles and responsibility of CME
<i>/vii/</i>	Benjamin Poit	Local Stakeholder (end user)	<ul style="list-style-type: none"> • Onsite inspection and Interview • Distribution scheme and funding • Carbon waiver rights • Sustainable development • Livelihood improvement • Employment opportunities • Improvement to air quality,



			<ul style="list-style-type: none"> • Improvement and access to cleaner energy and water sources; • Roles and responsibility of CME
<i>/viii/</i>	Cleophas Tirop	Local Stakeholder (end user)	Onsite inspection and Interview <ul style="list-style-type: none"> • Distribution scheme and funding • Carbon waiver rights • Sustainable development • Livelihood improvement • Employment opportunities • Improvement to air quality, • Improvement and access to cleaner energy and water sources; • Roles and responsibility of CME
<i>/ix/</i>	Dan Kuipers	Viability Africa	<ul style="list-style-type: none"> • Baseline Calculations • Sustainable Development • Operations and location • Sampling methodology • adopted • Sampling size • Survey check • QA/QC Analysis of results

2.3 Resolution of outstanding issues

The objective of this phase of the validation is to resolve any outstanding issues (issues that require further elaboration, research or expansion), which need be clarified prior to Carbon Check (Pty) Ltd' conclusion opinion on the project design. In order to ensure transparency a validation protocol is customized for the project. The protocol shows in transparent manner criteria (requirements), means of validation and the results from validating the identified criteria.

The validation protocol serves the following purposes:

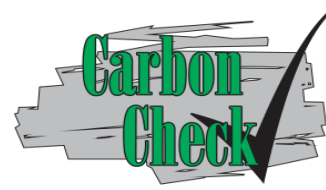
- It organizes, details and clarifies the requirements a GS project is expected to meet CDM requirements;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.
- It ensures that the issues are accurately identified, formulated, discussed and concluded in the validation report.
- It ensures the determination of achieving credible emission reductions from the project activity.

The validation protocol consists of two tables. The different columns in these tables are described in the figure below. The completed validation protocol for this project is enclosed in Appendix A to this report.

Findings established during the validation can either be seen as a non-fulfillment of GS requirements and criteria or where a risk to the fulfillment of project objectives is identified.

Corrective action requests (CAR) are issued, where:

- ✓ The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable, verifiable and additional emission reductions;
- ✓ The applicable GS requirements have not been met;
- ✓ There is a risk that emission reductions cannot be monitored or calculated.



A request for clarification (CL) may be issued if information is insufficient or not clear enough to determine whether the applicable GS requirements have been met.

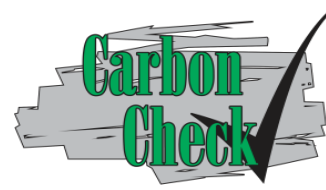
A forward action request (FAR) is raised during validation to highlight issues related to project implementation that require review during the first verification of the project activity. FARs shall not relate to the GS requirements for registration.

The validation protocol consists of two tables. Table 1 reflects the validation requirements and reference to the description used to verify the project activity against those requirements, as well as means of verification, reference to Table 2 (i.e. tables of findings) and preliminary and final opinion of the DOE on every particular requirement listed in table 1.

Validation Protocol Table 1: Requirement checklist				
Checklist Item	Validation Team Comment (MoV, Findings, comments, references, data sources)	Reference	Draft Conclusion	Final Conclusion
<i>The checklist items in Table 1 are linked to the various requirements the project should meet. The checklist is organised in various sections. Each section is then further subdivided as per the requirements of the topic and the individual project activity.</i>	<i>The section is used to elaborate and discuss the checklist item in detail. It includes the assessment of the Validation team and how the assessment was carried out. The reporting requirements of the VVS and Project Standard shall be covered in this section.</i>	<i>Gives reference to the information source on which the assessment is based on</i>	<i>Assessment based on evidence provided if the criterion is fulfilled (OK), or a CAR, CL or FAR is raised (see below). The assessment refers to the draft Validation stage.</i>	<i>In case a corrective action or a clarification request the final assessment at the final Validation stage is given.</i>

The findings of validation process are summarized in the table (s) below.

Finding (reference section of table 1)			
Classification	<input type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding (DOE)			
Corrective Action or clarification #1 <i>(PP shall write a detailed and clear corrective action or further information for clarification as per finding)</i>			
DOE Assessment #1 <i>The assessment shall encompass all open issues in the finding. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input type="checkbox"/> The finding is closed		



2.4 Internal quality control

The final validation report has passed a technical review and quality reviewer before being submitted to the project participant and Gold Standard Registry. A technical reviewer qualified in accordance with CCL's qualification scheme for CDM validation and verification performed the technical review.

2.5 Validation Team (compliance of § 148 e of VVS)

Carbon Check has appointed a competent team as per the UNFCCC Accreditation Standard and Carbon Check internal procedures. Further detail regarding team members background and experience can be found in the Workplan available on the GS registry and appendix below. The team is outlined below:

Full name	Validation Team		Type of Involvement						
	Location	Appointed for Sectoral Scopes (Technical Areas)	Supervising the work	Desk review	Site Visit + Interview	Report and protocol Writing	Technical Expert Input	Reporting Support	Technical Reviewer
Ravi Shankar (till 15/01/2013)	RSA	1.2, 2.1, 2.2, 3.1, 13.1			X				
Amit Anand (from 16/01/2013)	RSA	1.2, 13.1	X	X		X			
Barun Kumar	RSA	1.2, 13.1						X	
Stephanie Crichton ²	Chile	1.2, 13.2		X					
Adam Simcock	RSA	- -		X					
R. V. Nesari	RSA	1.1, 3.1, 4, 5.1					X		
Pankaj Kumar	RSA	1.1,1.2, 3.1,4.5,13.1							X

3. VALIDATION FINDINGS (COMPLIANCE OF § 148 B OF VVS)

The findings of the validation are stated in the following sections. The validation criteria (requirements), the means of validation and the results from validating the identified criteria are documented in more detail in the validation protocol in Appendix A.

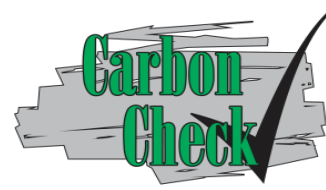
3.1 Project Design Document and Description

The objective of "Aqua Clara Water Filtration Program in Kenya" is to distribute approximately 23,875 household Bio Sand Filters (BSF), 4 Community based and 4,800 household based Sand And Membrane (SAM) filter units across 23 counties.

As verified from the PDD /02/, the project activity is located in rural and peri-urban regions of Republic of Kenya in the following 23 counties:

SI. No.	County	Latitude	Longitude
1.	Nandi	00.1666670	035.1500000
2.	Uasin Gishu	00.5166670	035.2833000
3.	Kisii	-00.6666670	034.7500000
4.	Nyamira	-00.7500000	035.0000000
5.	Nakuru	-00.5000000	036.0000000
6.	Muranga	-00.7500000	037.1166667

² GS Fast Track Auditor
FM 4.9 Validation Report Template Gold Standard



7.	Bomet	-00.8000000	035.2333000
8.	Homa Bay	-00.6833330	034.4500000
9.	Migori	34.8333333	000.6666667
10.	Kisumu	34.9167000	-000.2500000
11.	Kirinyaga	37.2833333	-000.5000000
12.	Embu	37.4500000	- 000.5333333
13.	Kericho	35.3000000	-000.3666667
14.	Elgeyo	35.5086111	000.9483333
15.	Kakamega	34.7500000	000.2833333
16.	Siaya	34.7500000	000.2833333
17.	Nyeri	36.9500000	-000.4166667
18.	Makueni	37.6166667	-001.8000000
19.	Busia	34.1500000	000.4333333
20.	Bungoma	34.5833333	000.5833333
21.	Trans Nzoia	34.5833333	000.5833333
22.	Machakos	7.2500000	001.5000000
23.	Nairobi	36.8166667	001.2833333

The spatial extent of the project activity and the geo-coordinates have been verified using tools like Google Earth /B20/ and Wikipedia /B19/.

These ACF water purifiers (hereinafter described as the project technology) i.e., BSF and SAM will treat contaminated water, making it fit for drinking purposes. The project activity proposes to replace the current water treatment practice in counties of Kenya, which is boiling water using non-renewable biomass (NRB) with household and community based water purification systems. The proposed project will reduce the burning of non-renewable biomass for boiling of water thus reducing greenhouse gas (GHG) emissions.

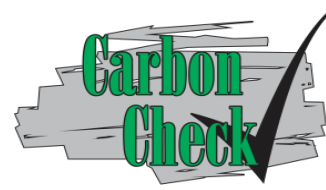
The operational lifetime of the filters is estimated to be more than 10 years the same was verified through review of Centre for Affordable Water and Sanitation Technology (CAWST): Fact Sheet 3.2 Concrete Bio sand Filter /09/. The project boundary has been described as 23 counties in the Republic of Kenya, the same was verified through review of PDD /02/ and interviews with PP /i/, /ii/ during the site visit. The crediting period is for a fixed 10 years. The project estimates emissions reductions of an average amount of 1, 21, 896 tCO₂e annually.

Starting date of project	Expected project operational lifetime	Crediting period
26/06/09	10 years	10 years

The bio sand water filters are sold to local entrepreneurs called Community Development Entrepreneurs, (C.D.E.s). Community Development Entrepreneurs, (C.D.E.s) conduct household visits to every filter-purchasing household after one month of ownership. They collect basic data on filter construction/use as well as on household details.

The distribution / implementation schedule of the project activity was verified through of review of distribution schedule /14-a/, /14-b/ and during site visit through interview with the project consultant /i/, /ii/. The distribution / implementation schedule is as:

Year	Bio Sand Filters (BSF) /14-a/, /14-b/	Sand and Membrane Filters (SAM) – Households /14-a/, /14-b/	Sand and Membrane Filters (SAM) /14-a/, /14-b/
2012	2409	1	Nil
2013	416	3	Nil
2014	3000	Nil	600
2015	3000	Nil	600
2016	3000	Nil	600
2017	3000	Nil	600
2018	3000	Nil	600



2019	3000	Nil	600
2020	1920	Nil	600
2021	1180	Nil	300
2022	50	Nil	300

The description of the project given in the final PDD /02/ is complete and transparent for the purpose of CDM and Gold Standard validation. The accuracy of the project description has been validated via the on-site inspection, interviews with project consultant /i/, /ii/; the available technical knowledge of the audit team, web based research and via comparisons with various other similar project activities.

Carbon Check (Pty) Ltd validation team considers the project description of the project contained in the PDD to be complete and accurate. The PDD complies with the relevant methodology, tools, forms and guidance at the time of PDD submission for requesting registration.

3.2 Project Eligibility

3.2.1 Scale of the project:

According to section III.e.2.1 of the GS Requirements /B02/ the threshold for large-scale or small-scale GS VER project activity is defined in accordance with UNFCCC rules. The project results in emission reduction of 1, 21, 896 tCO₂e annually, which is higher than the threshold of 60kt CO₂ equivalent annually for type III projects as per CMP 2, § 28 for small-scale thresholds. Hence the proposed project activity is a large-scale project under UNFCCC rules. The PP has also used the large-scale PDD template for the project activity. Furthermore, the PP has correctly identified the project as large-scale in section C.1 of the final GS Passport /05/.

3.2.2 Host Country

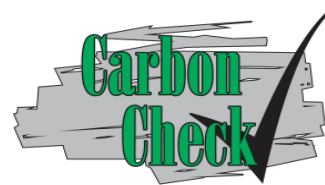
Republic of Kenya is the host country for the proposed project activity. The Host country does not have a quantitative reduction target under the Kyoto Protocol. Kenya acceded to UNFCCC on 25/02/2005 and ratified the Kyoto Protocol on 26/05/2005. Republic of Kenya is listed as non-Annex-I country to the UNFCCC.

Therefore, according to section III.b.3 of the GS Requirements /B02/, Republic of Kenya is eligible as host country for Gold Standard VER Projects and can participate efficiently in the GS VER programme. No retirement of AAUs is necessary at this point.

3.2.3 Project Type

The Aqua Clara Water Filtration Program in Kenya is a water treatment project. The project applies the GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011)”. This methodology falls under the scope 1 (Energy industries (renewable - / non-renewable sources)) and 3 (Energy demand) and 13 (Waste handling and disposal) as per Gold Standard guidance.

The Aqua Clara Water Filtration Program in Kenya project falls under the project type “Improved distributed heating and cooking devices (e.g. biogasifiers, cook-stoves), and distributed micro-scale electricity generation units (e.g. microhydro and PV for households)” as per Annex C of GS Toolkit (Version 2.1; dated 01/07/2009) /B03/. Gold Standard requires projects of this type to provide a clear description of the transfer of credits ownership all along the investment chain, and with proof that the end users are aware of and willing to give up their rights on emission reductions. The project developer has provided 3 agreements between Aqua Clara International and end users of the water filters accepting the transfer of credit ownership /29/. The same was found to be appropriate by the validation team.



Forward Action Request (FAR) 1: During first verification the verifying DOE shall verify and confirm VER transfer (waiver of carbon rights by end users of the technology) involving indirect communication mechanism i.e., through county representatives and village chiefs, The verifying DOE shall also verify how the end users of the technology were informed about waiving off their carbon rights by county representatives and village chiefs.

3.2.4 Greenhouse Gases

The project involves the distribution of ACF Bio Sand Filter (BSF) and the Sand and Membrane (SAM) household as well as community based water purification system and will replace the current water treatment practice in counties of Kenya, which is boiling of water using non-renewable biomass (NRB). The proposed project will reduce the burning of non-renewable biomass for boiling of water thus leading to emission reduction of 1, 21, 896 tCO_{2e} annually. Hence in accordance with section III.c.1 of the GS Requirements /B02/, the project is eligible under Gold Standard.

3.2.5 Technology Transfer/Innovation

Aqua Clara International is a Michigan-based 501(c) 3 non-profit corporation whose mission is to forge sustainable and scalable solutions to the problems associated with potable water in developing countries. Aqua Clara Foundation's flagship product the ACF Bio Sand Filter (BSF) and the Sand and Membrane (SAM) large-scale filter have lifetime of more than 10 years. The same was validated through review of Centre for Affordable Water and Sanitation Technology (CAWST): Fact Sheet 3.2 Concrete Biosand Filter /09/.

The water filters are manufactured in Kenya from locally available materials to keep costs low; are produced by local crafts people and/or local manufacturing units to create local jobs and businesses for this project activity. The technology is made available to remote areas of Kenya, which helps provide people easily access to safe drinking water. The same was verified through review of website of Aqua Clara International /B24/ and interviews /i/, /ii/ during OSV.

3.2.6 Official Development Assistance (ODA)

During the validation process, the validation team did not find that there was any diversion of official development assistance (ODA) funding due to the proposed project activity. The project participant has submitted an authorised ODA Declaration to the Gold Standard Foundation /07/. The declaration contains all elements of the ODA Declaration Template, i.e. Annex D /B10/ of the GS Toolkit /B03/. The declaration is included in Annex 1 of the final GS Passport /05/. The PP has also submitted financial statements /24/ of last three years i.e., 2009-10, 1010-11, and 2011-12 of Aqua Clara International.

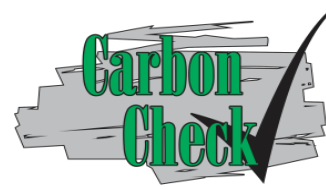
Hence in accordance with section III.g.1 of the GS Requirements /B02/, the project is eligible under Gold Standard.

3.2.7 Project timeframe

Previous announcement check

It has been stated in the section C.3 of GS Passport /05/ that no previous announcement of the project had been made. The same has been validated through review of UNFCCC website /B28/, Markit Environmental Registry /B18/ and review of Letter from ACF confirming exclusive inclusion of Sand and Membrane (SAM) Filters /13-a/ and Bio Sand Filters (BSF) /13-b/ that the project activity does not take part in any other certification schemes for credits related to the GHGs abated from the project activity.

Retroactive registration & crediting:



The Start date of Aqua Clara Water Filtration Program in Kenya is 26/06/2009; it is the date on which distribution of water filter under the proposed activity began. The same was validated through review of purchase receipt for Bio Sand Filters /50/. The project applies for a retroactive registration since the start date of the project activity is before the time of first submission i.e., 27/01/2012 to GS and before registration.

A Memorandum of Understanding (MoU) was signed between The Gold Standard Foundation and Viability Africa, LLC (Project Consultant) with regards to Fast tracking for GSv2.1 retroactive project activities - Aqua Clara Water Filtration Program in Kenya GS1078 /28/. The purpose of the MoU was to allow the project participant to by-pass the GSv2.2 retroactive registration Pre-Feasibility Assessment (PFA).

So, the project activity opted for retroactive registration as per section IV.a.4 of GS Requirements /B02/.

The project activity has completed the fast track process for retroactive registration and is listed on the GS website as a retroactive project /B18/. The fast-track checklist is provided in section 3.8 of the report below.

3.2.8 Other Certification Schemes

It is confirmed through onsite interviews /i/, /ii/ and review of Letter from ACF confirming exclusive inclusion of Sand and Membrane (SAM) Filters /13-a/ and Bio Sand Filters (BSF) /13-b/ that the project activity does not take part in any other certification schemes for credits related to the GHGs abated from the project activity.

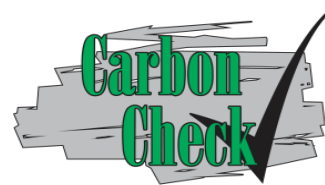
Hence, in accordance with section III.i of the GS Requirements /B02/, the project is eligible under Gold Standard.

3.3 Project Boundary

Baseline and project emissions as well as leakage are summarised in the following table:

Emissions	GHGs involved	Assessment of identified sources and gases
Baseline emissions	CO ₂ , CH ₄ , N ₂ O	CO ₂ , CH ₄ and N ₂ O emissions originating from the combustion of firewood in the old stoves for boiling of water in the baseline scenario.
Project emissions	CO ₂ , CH ₄ , N ₂ O	No project emission is envisaged due to the project activity as the project involves sale / distribution of zero energy water filtration systems. So, there would be no consumption of wood or fossil fuel.
Leakage	Five different leakage risks (a, b, c, d and e) are defined in the GS methodology /B01/	No source of leakage has been identified in the section B.6.3 of the PDD /02/ for the proposed activity.

The project boundary consists of the individual households in which each project technology i.e., water filter is installed, as defined by the contact details taken for each ACF water filter at the time of installation. This is in line with the boundary specified by the methodology /B01/: "The project boundary is the physical, geographical sites of the project technologies".



Moreover, the project boundary coincides with the political boundaries of the 23 counties of republic of Kenya. The spatial extent of the counties and their geo-coordinates have been verified using tools like Google Earth /B20/ and Wikipedia /B19/.

As woody biomass is the baseline fuel, the project boundary extends to the fuel production and collection area. The default value for fraction of NRB for Kenya as per UNFCCC is 92% /45/. Interviews performed during the site visit confirmed that in the project area, the fuel wood is either collected locally or purchased from people who collect it locally and then sell it to nearby households.

It is the conclusion of validation team that the firewood used in the project activity are produced, collected and supplied within the political boundaries identified for the project activity.

The GHG sources identified for the project are: CO₂, CH₄, and N₂O from fuel consumption, both in the baseline scenario. These are all the sources identified by the methodology /B01/, therefore the list can be considered exhaustive.

No GHG sources are identified for project scenario as the project involves sale / distribution of zero energy water filtration systems. So, there would be no consumption of wood or fossil fuel.

The identified boundary and selected sources and gases are justified for the project activity. The validation of the project activity did not reveal other greenhouse gas emissions occurring within the proposed GS VER project activity boundary as a result of the implementation of the proposed project activity which are expected to contribute more than 1% of the overall expected average annual emission reduction, which are not addressed by the GS methodology “Technologies and Practices to Displace Decentralised Thermal Energy Consumption” (version 1.0; Dated 11/04/2011) /B01/.

3.4 GHG Emission Reduction Estimation

According to the Gold Standard methodology /B01/ the calculation of emission reductions is based on the multiplication of the emissions from quantity of fuel consumed, CO₂ emission factor of the fuel to be displaced and also net calorific value of the fuel to be displaced.

The annual amounts of fuel consumed are based on the results of the water boiling tests, which provide specific data on firewood consumed to boil one litre of water using baseline technology i.e., cook stoves. As the option of a fixed ex-ante baseline was chosen instead of an evolving baseline, the UNFCCC default fraction of non-renewable biomass (NRB) /45/ is fixed for the crediting period of ten years.

The Gold Standard methodology takes not only CO₂ emissions but also CH₄ and N₂O emissions into account, emission factors have been indicated for these GHGs, too.

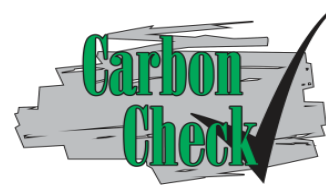
The total amount of emission reductions is calculated by subtracting the project emissions and leakage emissions from the baseline emissions. The overall GHG reduction is calculated in accordance with the applied methodology /B01/ by using the below formula:

$$ER_y = (\sum BE_{b,y} - \sum PE_{p,y}) * U_{p,y} - \sum LE_{p,y} \quad (1)$$

Where,

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

The expected emissions reductions were calculated to be 13, 40, 856 tCO₂e over a 10 year crediting period.



The table below summaries validation team’s determination of emission reduction:

All assumptions made for estimating GHG are listed in the PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Refer section B and Annex 3 of the PDD /02/.
All data used by project participants are listed in the PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Refer section B and Annex 3 of the PDD /02/.
Their references and sources are also listed in the PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Refer section B and Annex 3 of the PDD /02/.
Formulas, parameters, values are complete, accurate, transparent and conservative	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Refer section B and Annex 3 of the PDD /02/.
All the references and documents used are correctly quoted and conservatively interpreted in the PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The data and parameters available prior to project implementation and which have to be monitored during project lifecycle are correctly quoted and conservatively applied as demonstrated in the PDD /02/.
Methodology has been applied correctly to calculate project emissions, baseline emissions, leakage emissions and emission reductions	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Relevant procedures have been established for the project operation and the correct monitoring; refer section B and Annex 3 of PDD /02/.
All the emissions of baseline emissions can be replicated using information provided in the PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Refer section B.4, B.6 and Annex 3 of PDD /02/

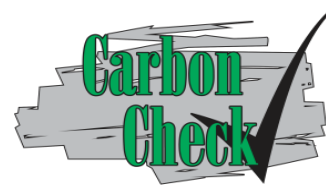
With regard to § 97 of the VVS, the validation team confirm that:

- All the assumptions and data used by the project participants are listed in the PDD, including their references and sources;
- All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PDD;
- Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
- Relevant national and/or sectoral policies and circumstances are considered and listed in the PDD
- The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed GS-VER project activity.

The validation team has assessed the calculations of project emissions, baseline emissions and leakage and emission reductions. Corresponding calculations were carried out based on calculation spreadsheets. The parameters and equations presented in the PDD /02/ and further documentation have been compared with the information and requirements presented in the methodology and respective tools.

The equation comparison has been made explicitly following all the formulas presented in the calculation files /04/. The calculation of the baseline emissions followed the procedures described in the methodology Gold Standard methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/.

Finally, the data, rationales assumptions, justifications and documentation provided have been checked using local knowledge and sectoral expertise, the validation team has crosschecked the same.



3.4.1 Algorithms and/or Formulae used to determine emission reductions

CCL conducted assessment of baseline emissions, project emissions, leakage, and emission reductions. The parameters and equations presented in the PDD /02/, as well as other applicable documents, have been compared with the information and equipment stipulated in the methodology /B01/. The assumptions and data used to determine the emission reductions are described in the PDD /02/ and all the sources have been checked and confirmed by validation team. Based on the reviewed information, it can be confirmed that the sources used are correctly quoted and interpreted in the PDD /02/. The values in the PDD /02/ are considered to be reasonable based on the documentation and references reviewed, as well as, the result of the interviews. The baseline methodology has been correctly applied according to the requirements.

Baseline Emissions:

a) Bio Sand Filters (BSF):

Baseline emissions were estimated in accordance with the Annex 3 of the methodology /B01/. The Baseline emissions associated with the project activity are calculated as:

$$BE_{b,y} = B_{b,y} * ((f_{NRB,b,y} * EF_{b,fuel,CO2}) + EF_{b,fuel, nonCO2}) * NCV_{b,fuel} \quad (2)$$

Where,

$BE_{b,y}$	=	Emissions for baseline scenario b during the year y in tCO ₂ e
$B_{b,y}$	=	Quantity of fuel consumed in baseline scenario b during year y, in tons,
$f_{NRB,b,y}$	=	Fraction of biomass used during year y for the considered scenario that can be established as non-renewable biomass
$EF_{b,fuel,CO2}$	=	CO ₂ emissions factor of the fuel that it substituted or reduced. 112 tCO ₂ /TJ for Wood/Wood waste, or the IPCC default value of the relevant fuel
$EF_{b,fuel, nonCO2}$	=	Non-CO ₂ emissions factor of the fuel that is substituted or reduced
$NCV_{b,fuel}$	=	Net calorific value of the fuel that is substituted or reduced (IPCC default for wood fuel, 0.015 TJ/ton)

Baseline Fuel Consumption ($B_{b,y}$) calculation :

$B_{b,y}$ = Number of person-days * Baseline Fuel used to Treat Water (T/L) * Total Safe Water consumed in project scenario (L/p/d)

$$B_{b,y} = (1 - C_j) * N_{j,y} * W_{i,y} * (Q_{j,y} + Q_{j,rawboil,y}) \quad (3)$$

Where,

$B_{b,y}$	=	Quantity of fuel consumed in baseline scenario b during the year y in tons
C_j	=	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
$N_{j,y}$	=	Number of person days consuming water supplied by project scenario p through year y
$W_{i,y}$	=	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
$Q_{j,y}$	=	Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day
$Q_{j,rawboil,y}$	=	Quantity of raw water boiled in the project scenario p per person per day



Parameters involved in Baseline Emission calculation:

Parameters	Values	Units	Source of Data
BE _{b,y}	0.0249	tCO ₂ e	Calculated using Equation No.: 2.
B _{b,y}	0.01485	Tonne	Calculated using Equation No.: 3.
N _{i,y}	2,555	Person days	Baseline Survey /52/
C _i	0.04	Fraction	Baseline Survey /52/
W _{i,y}	0.000418	Tonne	Baseline Water Boiling Test /21/
Q _{i,y}	5.241	Litre	Baseline Survey /52/
Q _{i,rawboil,y}	0.050	Litre	Baseline Survey /52/
f _{NRB,b,y}	92%	Fraction	UNFCCC default value /45/
EF _{b,fuel,CO2}	112	tCO ₂ /TJ for Wood	IPCC default Value /B27/
NCV _{b,fuel}	0.015	TJ/ton	IPCC default Value /B27/
EF _{b,fuel,CH4}	7.5	tCH ₄ /TJ	Calculated using IPCC default CH ₄ emission Factor for wood /B27/ and GWP of CH ₄ /B31/.
EF _{b,fuel, N2O}	1.192	tN ₂ O/TJ	Calculated using IPCC default N ₂ O emission Factor for wood /B27/ and GWP of N ₂ O /B31/.

b) Sand and Membrane (SAM) Filters:

For the SAM filters the total safe water consumed in the project scenario is the amount of safe water supplied by the project technology. The applied GS methodology /B01/, allows calculation of baseline emission based on the per day capacity of project technology.

The baseline emissions realized from the SAM filter can be calculated using Equation No.: 2 stated above and all the parameters and values stated in the table “Parameters involved in Baseline Calculation” remain applicable except for parameter Q_{i,y}. However, the parameter B_{b,y} is calculated as the baseline fuel consumption required to boil one litre of water, using the formula below:

For Community based SAM filters:

$$B_{b,y, \text{SAM, Community}} = (1 - C_i) * W_{i,y} * Q_{i,y} \quad (4)$$

For household based SAM filters :

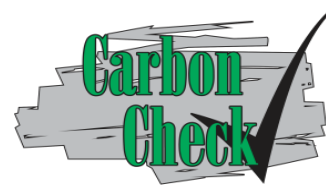
$$B_{b,y, \text{SAM, households}} = (1 - C_i) * W_{i,y} * Q_{i,y} * N_{j,y} \quad (5)$$

Parameters	Values	Units	Source of Data
BE _{b,y}	0.0006216	tCO ₂ e	Calculated using Equation No.: 2.
B _{b,y, SAM, Community}	0.000401	Tonne	Calculated using Equation No.: 4.
B _{b,y, SAM, households}	0.0168	Tonne	Calculated using Equation No.: 5.
Q _{i,y}	1	Litre	Baseline Survey /52/

Project Emissions:

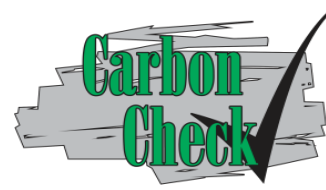
No project emission is envisaged due to the project activity as the project involves sale / distribution of zero energy water filtration systems. So, there would be no consumption of wood or fossil fuel. The same was verified through review of product information sheet /16/, through physical inspection and interview with project consultants /i/,/ii/. Therefore, Σ PE_{p,y} = 0 (Zero).

Leakage:



As far as leakage emissions are concerned, the methodology requires assessment of five potential instances where the project could incur leakage emissions. The PP reports the leakage caused by production and transportation of ACF water filters. The leakage assessment is described below:

Sl. No.	Type of leakage	Assessment
1.	The displaced baseline technologies are reused outside the project boundary in place of lower emitting technology or in a manner suggesting more usage than would have occurred in the absence of the project.	There will be no displaced baseline technology, as households will continue to cook using the cook stoves they own. Therefore there will be no leakage impact to consider due to this point.
2.	The non-renewable biomass or fossil fuels saved under the project activity are used by non-project users who previously used lower emitting energy sources.	The volume of water treated by boiling in the baseline consumes a fractional portion of the biomass used by families. Biomass is currently non-renewable and expensive for families. It is highly unlikely that any biomass saved by the project activity will significantly reduce biomass costs outside the project boundary. Therefore there will be no leakage impact to consider due to this point.
3.	The project significantly impacts the NRB fraction within an area where other CDM or VER project activities account for NRB fraction in their baseline scenario.	The small size of the project is unlikely to have a significant impact on the NRB fraction. Therefore the leakage arising from significantly impacting NRB is considered null.
4.	The project population compensates for loss of the space heating effect of inefficient technology by adopting some other form of heating or by retaining some use of inefficient technology	The project introduces zero energy water filters and their introduction will not have an impact on fuel requirement for space heating as there will be no displacement of baseline technology i.e., cook stoves. Therefore there will be no leakage impact to consider due to this point.
5.	By virtue of promotion and marketing of a new technology with high efficiency, the project stimulates substitution within households who commonly used a technology with relatively lower emissions, in cases where such a trend is not eligible as an evolving baseline.	This leakage parameter is not applicable in this project, where the activity is provisioning of a water treatment system. The project doesn't involve promoting any particular stove or fuel type. Therefore there will be no leakage impact to consider due to this point.



The validation team confirms that there are no perceived leakage possibilities on account of the proposed project activity.

Therefore, $\sum LE_{p,y} = 0$ (Zero).

Emission Reduction:

The total amount of emission reductions is calculated by subtracting the project emissions and leakage emissions from the baseline emissions. The overall GHG reduction is calculated in accordance with the applied methodology /B01/ by using the below formula:

$$ER_y = (\sum BE_{b,y} - \sum PE_{p,y}) * U_{p,y} - \sum LE_{p,y} \tag{1}$$

Where,

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

The calculation of emission reductions are presented in a transparent manner in the PDD /02/. Based on the calculations and results presented in the sections above, the implementation of the project activity will result in an average ex-ante estimation of emission reduction conservatively calculated to be averaging 1,21, 896 tCO₂e annually for the selected crediting period.

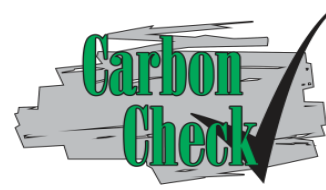
All assumptions and data used by the project participants are listed in the PDD /02/ and/or supporting documents, including their references and sources. All documentation used by the project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PDD /02/. All values used in the PDD /02/ are considered reasonable in the context of the proposed GS VER project activity. The baseline methodology /B01/ has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions. All estimates of the baseline, project and leakage emissions can be replicated using the data and parameter values provided in the PDD /02/.

3.5 Baseline and Monitoring

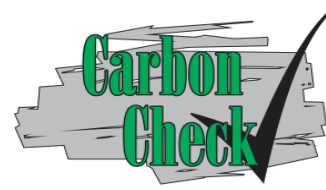
Approved GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) has been correctly quoted and applied for the proposed project activity, the validation team compared it with actual text of the applicable version of the methodology.

The validation team determined the applicability of methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) as follows:

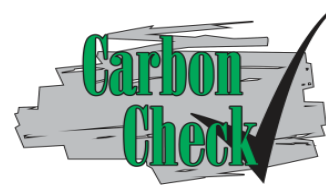
Applicability condition of the GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011)	Criteria fulfilled	Assessment by the validation team
This methodology is applicable to programs or activities introducing technologies and/or practices that reduce or displace greenhouse gas (GHG) emissions from the thermal energy consumption of households and non-domestic premises.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The project activity involves sale / distribution of zero energy household and community based water purification system which reduces GHG emissions by reducing the amount of non-renewable biomass combusted for boiling of water, which is the current water treatment practice



Applicability condition of the GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011)	Criteria fulfilled	Assessment by the validation team
		<p>in counties of Kenya.</p> <p>The same was confirmed through review of product information sheet /16/, sales record /51/, sales receipt /51/.</p>
<p>The project boundary can be clearly identified, and the technologies counted in the project are not included in another voluntary market or CDM project activity (i.e. no double counting takes place). Project proponents must have a survey mechanism in place together with appropriate mitigation measures so as to prevent double-counting in case of another similar activity with some of the target area in common.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>The project boundary can be clearly identified and is 23 counties throughout the Republic of Kenya. The geo-coordinates for the counties have been verified using tools like Google Earth /B20/ and Wikipedia /B19/.</p> <p>The water treatment technology sold /distributed in the project are not included in another voluntary market or CDM project (i.e. no double-counting takes place). It is confirmed through onsite interviews /i/, /ii/ and review of Letter from ACF confirming exclusive inclusion of Sand and Membrane (SAM) Filters /13-a/ and Bio Sand Filters (BSF) /13-b/ that the project activity does not take part in any other certification schemes for credits related to the GHGs abated from the project activity.</p> <p>The PP will record the names of the people using the filters, as well as their address and contact information. In the sales record /51/.</p>
<p>The technologies each have a continuous useful energy output of less than 150kW per unit (defined as total energy delivered from start to end of operation of a unit divided by time of operation). For technologies or practices that do not deliver thermal energy in the project scenario but only displace thermal energy supplied in the baseline scenario, the 150kW threshold applies to the displaced baseline technology.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>The project activity involves sale / distribution of water filters, which do not deliver energy output but only displace thermal energy supplied in the baseline scenario by cook stoves.</p> <p>The useful energy output of baseline cook stoves is 51 kW, which is less than the threshold of 150kW. The same was verified through review of the calculation sheet provided by the PP /04/.</p>
<p>The use of the baseline technology as a backup or auxiliary technology in parallel with the improved technology introduced by the project activity is permitted as long as a mechanism is put into place to encourage the removal of the old technology (i.e. discounted price for the improved technology) and the definitive</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>The technology used in the project activity i.e., water filters will displace GHG emissions from the use of fuel to boil water but will not replace the cook stoves, which will still be used for cooking purposes. The PP will monitor continued use of traditional stoves via the monitored parameters $Q_{p,rawboil,y}$ and $Q_{p,cleanboil,y}$ which quantify the</p>

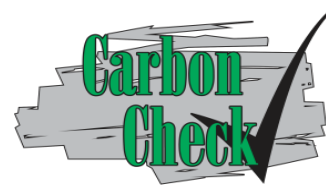


Applicability condition of the GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011)	Criteria fulfilled	Assessment by the validation team
<p>discontinuity of its use. The project documentation must provide a clear description of the approach. The project documentation must provide a clear description of the approach chosen and the monitoring plan must allow for a good understanding of the extent to which the baseline technology is still in use after the introduction of the improved technology, whether the existing baseline technology is not surrendered at the time of the introduction of the improved technology, or whether a new baseline technology is acquired and put to use by targeted end users during the project crediting period. The success of the mechanism put into place must therefore be monitored, and the approach must be adjusted if proven unsuccessful. If an old technology remains in use in parallel with the improved technology, corresponding emissions must of course be accounted for as part of the project emissions.</p>		<p>amount of raw water and purified water boiled using the baseline technology. Moreover, the PP will monitor raw and clean water boiled in the project scenario and use these mean estimates for calculation of project emissions.</p> <p>The same is found acceptable to the validation team.</p>
<p>The project proponent must clearly communicate to all project participants the entity that is claiming ownership rights of and selling the emission reductions resulting from the project activity. This must be communicated to the technology producers and the retailers of the improved technology or the renewable fuel in use in the project situation by contract or clear written assertions in the transaction paperwork, If the claimants are not the project technology end users, the end users should be notified that they cannot claim for emission reductions from the project.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>The project proponent has clearly communicated to all project participants that ACF is claiming ownership rights of and selling the emission reductions resulting from the project activity. The project developer has provided 3 agreements between Aqua Clara International and end users of the water filters accepting the transfer of credit ownership /29/. The same was found to be appropriate by the validation team.</p>
<p>Project activities making use of a new biomass feedstock in the project situation (e.g. shift from non-renewable to green charcoal, plant oil or renewable biomass briquettes) must comply with relevant Gold Standard specific requirements for biomass related project activities, as defined in the latest version of the Gold Standard rules. If the biomass feedstock is sourced from a dedicated plantation,</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>The technology distributed under the proposed project activity does not make use of any fuel. The same was confirmed through review of product information sheet /16/. Therefore this condition does not apply to this project.</p>



Applicability condition of the GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011)	Criteria fulfilled	Assessment by the validation team
these criteria must apply to both plantations established for the project activity AND existing plantations that were established in the context of other activities but will supply biomass feedstock.		
Adequate evidence is supplied to demonstrate that indoor air pollution (IAP) levels are not worsened compared to the baseline, and greenhouse gases emitted by the project fuel/stove combination are estimated with adequate precision. The project fuel/stove combination may include instances in which the project stove is a baseline stove.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>The technology distributed under the proposed project activity does not make use of any fuel and hence indoor air pollution (IAP) levels are not worsened compared to the baseline. Furthermore, no greenhouse gases are emitted by the project fuel/stove combination. The same was confirmed through review of product information sheet /16/.</p> <p>Project involves sale/distribution of water filters and hence no such instance is anticipated where project stove is a baseline stove.</p>
Records of renewable fuel sales may not be used as sole parameters for emission reduction calculation, but may be used as data informing the equations in section II of this methodology if correlated to data on distribution and results of field tests and surveys confirming (a) actual use of the renewable fuel and usage patterns such as average fraction of non-renewable fuels used in mixed combustion or seasonal variation of fuel types, (b) GHG emissions, (c) evidence of CO levels not deteriorating (d) any further factors effecting emission reductions significantly.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>The technology distributed under the proposed project activity does not make use of any fuel. The same was confirmed through review of product information sheet /16/. Therefore this condition does not apply to this project.</p>
Only end users that boil water or are currently using unsafe water are eligible for crediting.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>The project involves distribution of water filters to only such end users, which boil water or are currently using unsafe water. The same was verified through review of Paired sample surveys questionnaire /18/ by PP.</p>

The assessment of the project’s compliance with the applicability criteria of the methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/ as documented in the PDD /02/ part B and Annex 3, which are evaluated in detail under the validation protocol in Appendix A to this report based from the webhosted PDD. The validation teams have verified that the documentation content is correctly quoted and interpreted in the PDD /02/. Thus the validation team confirms the applicability of the selected methodology to the proposed GS project activity.



3.5.1 Conservative Selection of Baseline Scenario

The methodology applicable to this project does not list a number of alternative baseline scenarios, but rather requests that the most appropriate scenario is identified for each project /B01/. According to the methodology, “a baseline scenario is defined by the typical baseline fuel consumption patterns in a population that is targeted for adoption of the project technology”.

For the purpose of determining the baseline fuel consumption patterns in the target population, and in accordance with the requirements of the methodology, three baseline studies need to be conducted by project participant:

- Assessment of fraction of non-renewable biomass (f_{NRB}) /45/;
- Baseline survey (BS) of target population characteristics /52/;
- Baseline performance field test (BFT) of fuel consumption /52/.

As allowed by the methodology, the baseline survey and baseline performance field test (BFT) were conducted concurrently with the same end users. With regard to the type of baseline selected (fixed or non-fixed), the methodology indicates that “in project activities where all units are installed at the start or in project activities targeting non-industrial applications, the baseline is considered by-default fixed in time during the considered crediting period” /B01/. Since the project activity consists of non-industrial applications, a fixed baseline has correctly been selected.

The baseline scenario identified for this project consists of the existing kitchen practice of boiling water to treat water for consumption on stoves using non-renewable biomass identified by the baseline studies /45/52/. The methodology allows for the coexistence of multiple baseline scenarios, one for each technology used in the project activity. At the time of validation, the project activity uses one technology only i.e., water filters, so one baseline scenario has been identified.

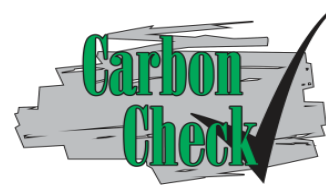
The determination of the baseline is in accordance with the requirements set by the methodology /B01/.

With regard to the baseline studies, a UNFCCC default value of 92% has been used for the parameter f_{NRB} /45/. The value provided by the CDM EB have also been approved by the Designated National Authority of Republic of Kenya on 19/09/2012 approved the default value of f_{NRB} provided by CDM EB³. The same is deemed acceptable to the validation team.

With regard to the Baseline Survey, according to the guidelines set out by methodology, a project that aims to disseminate >1000 interventions requires a sample of 100. The baseline survey performed involved 105 households /52/, so it is based on a representative sample. The survey collected all the information required by the methodology, as can be seen by the questionnaire /18/.

The Baseline Survey of target population characteristics and Water Boiling tests were conducted on 105 households in a paired sample approach, which is allowed by the methodology. The sampling frame covered target areas to ensure representativeness and the sample size was calculated at 100 subsets as recommended by the methodology. Firewood was pre-weighted with the aid of a weighting scale. Before running the statistical analysis, values, which were very different to the majority of the sample, were eliminated, to control for mistakes with data recording. The elimination of values, which were very different to the majority of sample, is based on use of modified z-score test, in which z–score is determined based on an estimator i.e., median of absolute deviation about the median (MAD), which is outlier resistant. In this approach an observation with a modified z–score greater than three and a half (3.5) is labelled as an outlier. This is a reliable test since the parameters used to

³ <http://cdm.unfccc.int/DNA/fNRB/docs/kenya.pdf>
FM 4.9 Validation Report Template Gold Standard



calculate the modified z-score are minimally affected by the outliers and this approach is less susceptible to the extreme values. Furthermore, modified z-score test is a common tool for outlier identification. The same approach is deemed acceptable to validation team based on the review of Automate Outlier Test spread sheet /58/ submitted by PP and was further confirmed through review of publicly available information /65/, /66/, /67/.

The sample size for the surveys was determined in accordance with the methodological provisions as indicated above, through Simple Random Sampling following the guidance give in Annex 4 of the methodology /B01/.

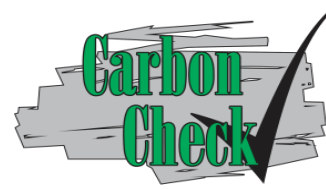
The approved baseline methodology has been correctly applied to identify a realistic and credible baseline scenario, and the identified baseline scenario most reasonably represents what would occur in the absence of the proposed GS-VER project activity.

All the assumption and data used by the project participants are listed in the PDD and/or supporting documents. All documentation relevant for establishing the baseline scenario are correctly quoted and interpreted in the PDD. Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable. Relevant national and/or sectoral policies and circumstances are considered and listed in the PDD.

The baseline determination has been conducted transparently in line with the methodology As per the applied methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/. The baseline scenario determined for this project activity is the existing kitchen practice of boiling water to treat water for consumption on stoves using non-renewable biomass.

The validation team confirms that the proposed project activity meets the above requirement, in terms of the baseline identified for the project activity is the scenario that reasonable represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the proposed project activity. The description of the identified baseline scenario, including the description of the technology that would be employed and or activities that would have taken place in the absence of the project activity have been included in the PDD. All applicable GS requirements have been taken into account as well as relevant nation and/or sectoral policies. Therefore, the baseline scenario as prescribed in the applied methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/ is applicable to the proposed project activity. The validation took cognizance of § 88 to 100 VVS (version 05.0).

<p>The approved baseline methodology applicable to the project explicit criteria implicit criteria (e.g. available scenarios, applicability of formulas for BE/PE/LE calculations)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/ is applicable to the project activity. Refer section B.2 of PDD /02/ and section 3.6 of the validation report.</p>
<p>PDD includes all assumptions and data used by project participants</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>All assumptions and data available in PDD - Section B and Annex 2 /03/.</p>
<p>All the references and documents used are relevant for establishing the baseline scenario</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Reference documents for the establishment of the baseline scenario are Baseline Survey /52/, Paired sample surveys questionnaire /18/, WBT results /21/.</p>
<p>All the references and documents used are correctly quoted and conservatively</p>	<p><input checked="" type="checkbox"/> Yes</p>	<p>Reference documents for the establishment of the baseline</p>



interpreted in the PDD	<input type="checkbox"/> No	scenario are Baseline Survey /52/ , Paired sample surveys questionnaire /18/, WBT results /21/.
All relevant policies / regulations considered are listed in the PDD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	National policies / regulations have been analyzed and referenced in the PDD /02/.
Identified potential baseline scenarios reasonably represent what would/could occur in the absence of the proposed project activity	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Without the project activity firewood from non-renewable sources would continue to be used to boil water for drinking purposes. Refer Baseline Survey /52/, Paired sample surveys questionnaire /18/, WBT results /21/.
The baseline scenario selection is appropriate and determined according to the methodology	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/ is applicable to the identified baseline scenario. Refer section B of PDD /02/ and section 3.6 of the validation report.
The approved methodology used is applicable to the identified baseline scenario	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/ is applicable to the identified baseline scenario. Refer section B of PDD /02/ and section 3.6 of the validation report.

The approved baseline methodology has been correctly applied to identify a realistic and credible baseline scenario, and the identified baseline scenario most reasonably represents what would occur in the absence of the proposed GS project activity.

All the assumption and data used by the project participants are listed in the PDD and/or supporting documents. Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable.

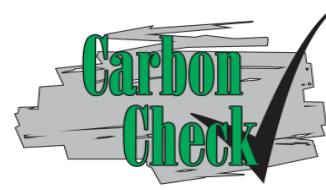
3.5.2 Application of Monitoring Methodology and Monitoring Plan

The proposed project correctly applied the approved GS Methodology, “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/.

The means of monitoring described in the plan comply with the requirements of the methodology:

- The Total Sales Records (TSR) will collect all information required by the methodology;
- The project database;
- On-going monitoring studies: Monitoring survey, the Usage Survey, Project Field Test Update as described in the monitoring plan, comply with the requirements set by the methodology.

Monitoring procedure being applied to the water filters distributed up to the day of the site visit was observed by the Validation team and is considered feasible /i/, /ii/. So, in the opinion of validation team the project participant is able to implement the monitoring plan.



3.5.2.1 Parameters determined ex-ante

Parameters that are not monitored throughout the crediting period but that are determined only once and thus remain fixed throughout the crediting period are as follows:

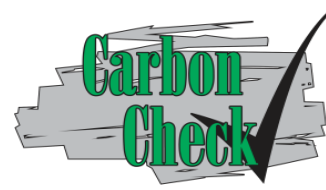
Parameter	Unit	Value	Source of Data	Assessment by Validation Team
$W_{i,y}$	Tonne/Litre	0.000418	Baseline Water Boiling Test /52/.	Quantity of fuel in tons required to treat 1 litre of water using technologies representative of baseline scenario b during project year y, as per Baseline Water Boiling Test has been fixed ex-ante and is in accordance with the applied GS methodology /B01/.
$EF_{b,fuel,CO_2}$	tCO ₂ /TJ	112	IPCC default value as per applied methodology /B01/.	CO ₂ emissions factor for the wood fuel has been fixed ex-ante and is in accordance with the applied GS methodology /B01/.
NCV_b	TJ/ton	0.015	IPCC default value as per applied methodology /B01/.	Net calorific value of wood fuel used in the baseline has been fixed ex-ante and is in accordance with the applied GS methodology /B01/.
$EF_{b,fuel,CH_4}$	tCH ₄ /TJ	0.3	IPCC default value /B27/	CH ₄ emission factor of the wood fuel has been fixed ex-ante and is in accordance with the applied GS methodology /B01/.
$EF_{b,fuel,N_2O}$	tN ₂ O /TJ	0.004	IPCC default value /B27/	N ₂ O emission factor of the wood fuel has been fixed ex-ante and is in accordance with the applied GS methodology /B01/.
GWP CH ₄	-	25	IPCC default value /B31/	GWP of CH ₄ has been fixed ex-ante and is in accordance with the applied GS methodology /B01/.
GWP N ₂ O	-	298	IPCC default value /B31/	GWP of N ₂ O has been fixed ex-ante and is in accordance with the applied GS methodology /B01/.

The validation team confirms that all relevant parameters have been sufficiently considered and the values of the parameters are real, measureable and conservative

3.5.2.2 Parameters monitored ex-post

According to the approved methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/, the following parameters will be monitored:

Sl. No.	Parameters	Description
1	$Q_{p,y}$	Quantity of safe water supplied in the project scenario p during the year y, using the ‘zero emissions’ clean water supply technology
2	$Q_{p,clean,boil,y}$	Quantity of safe (treated, or from safe supply) water boiled in the project scenario p, after installation of project technology
3	$Q_{p,raw,boil,y}$	The raw or unsafe water that is still boiled after installation of



		the water treatment technology.
4	$N_{p,y}$	Number of persons consuming water supplied by project scenario p through year y
5	$U_{p,y}$	Usage rate in project scenario p during year y. This data will be used to account for households, which discontinue use of the filters from the monitored sample frame and thereafter be extrapolated across the total sales record.
6	Quality of the treated water	Performance of the BSF Filter and SAM filters. Household SAM filters shall be examined at the household level while water quality tests for the community SAM units shall be investigated at the point of sale.
7	C_j	Expressed as a percentage, this is the portion of users of the project technology j or who in the baseline were already consuming safe water without boiling it
8	Water treatment Practices in the baseline scenario	This parameter will be collated so as to describe water treatment practices in the baseline scenario.
9	$LE_{p,y}$	Leakage in project scenario p during year y

In summary, the validation team is convinced of compliance of the monitoring plan with the requirements of the monitoring methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/. During the on-site assessment, the validation team interviewed the project consultant /i/, /ii/ that the monitoring arrangements described in the monitoring plan are feasible within the project design. The emission reductions resulting from the proposed GS project activity can be reported ex post and verified.

3.6 Additionality:

Additionality of the project activity has been demonstrated by using the guidance provided under Section 3 (paragraph 3) of the applied GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/. With regard to the project being previously announced to go on without carbon revenues, the Project participant has declared in the GS Passport /05/ submitted that no previous announcement was made. Validation team has not come across any information that would indicate that any previous announcement was made.

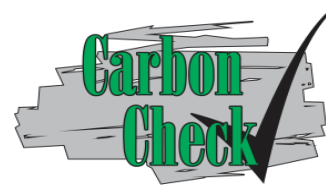
The PP has demonstrated additionality by stating that the project is ‘first-of-its-kind’ and faces a realistic and credible barrier due to prevailing practice. PDD /02/ provides for the demonstration that the project is ‘first-of-its-kind’ and faces a realistic and credible barrier due to prevailing practice using the approach provided in the applied methodology /B01/. Since the PP has demonstrated the project to be ‘first-of-its-kind’, based on the guidance provided

in the applied methodology /B01/, validation team concludes the additionality demonstration to be appropriate.

The evidences were transparently reviewed by the validation team and considered to be effective. The proposed project activity demonstrated that is not business-as-usual practice, i.e. the proposed project activity is additional by proving that its is a First Of Its Kind activity in the applicable geographical region of Republic of Kenya and faces a realistic and credible barrier due to prevailing practice.

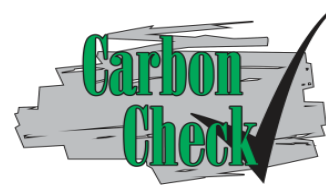
Early consideration of carbon revenues and chronology of events to demonstrate real and continuing actions to secure carbon revenue

The project activity is an existing project with a starting date after 02nd August 2008. The start date was 26/06/2009; it is the date on which distribution of water filter under the proposed



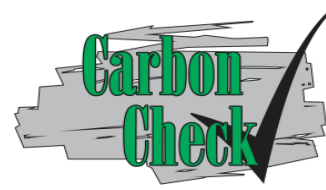
activity began. The same was validated through review of purchase receipt for Bio Sand Filters /50/. As the project activity has a start date after 2 August 2008, and a PDD was not published for global stakeholder consultation before the project activity start date. Therefore, in accordance with the §107–109 of VVS (Version 05.0) /B30/, CCL has validated that the project participant was aware of the carbon revenues prior to the project activity start date, and that the benefits from the sale of carbon revenues were a decisive factor in the decision to proceed with the project, i.e. serious consideration of carbon revenues was taken before the start date, and that real and continuing actions were taken to secure carbon revenues. The following table illustrates the prior consideration steps (before the project start date) and the continuing actions to secure carbon revenues after the project start date:

Sl. No.	Date	Milestone	Assessment by validation team
1.	27/04/2009	ACF Board members declare an interest in developing carbon credits to finance the project activity.	Memorandum of Aqua Clara Board Meeting (dated 27/04/2009) under point 8.I. (iii) states “our goal is to develop relationships with large, global affiliates and to continue the development of a carbon credit program with Kyle Denning that has the potential to provide substantial support for ACF once it is operational.” /59/
2.	26/06/2009	Start date of project activity i.e., it is the date on which distribution of water filter under the proposed project activity began.	CCL has validated the same through review of purchase receipt for Bio Sand Filters /50/.
3.	10/09/2010	ACF Board reaffirms interest in working with Viability Africa to develop carbon credits in line with on-going discussion on how to structure the said programme.	Minutes of Meeting of Board of Directors of Aqua Clara (dated 10/09/2010) under point IV.C states “... ACI and Viability Africa undertook a systematic planning process we both believed is necessary to formally pursue carbon credit financing. These actions provided the baseline for the monitoring and evaluation processes, along with reporting procedures, and formed the foundation for the contract we are executing with Viability Africa. Knopke described the elements of the carbon credit financing and explained that it is a potential source of revenue for Aqua Clara since our filters qualify for carbon credits. Among the items discussed was the principle that individuals or group that purchase filters are required to sign a form confirming that all carbon credits inure to Aqua Clara’s benefit. The Board expressed its support for this initiative and authorized the president to proceed with it.” /60/
4.	09/03/2011	ACF Boards confirms and	CCL has reviewed the letter titled



		executes contract with Viability Africa to commence development of carbon assets.	"Carbon Credit Contract" from Mr. Harry J. Knopke (President, Aqua Clara) to Nathan Gachugi (Project Manager, Viability Africa) (dated 09/03/2011), which states "Aqua Clara International is executing a contract with Viability Africa, LLC to pursue carbon Credit financing for our water filtration in Kenya" /61/.
5.	23/03/2011	Contract for Professional Services signed between ACF and Viability Africa, LLC.	CCL has reviewed the contract (Dated 23/03/2011) /62/
6.	20/09/2011	Submission of LSC Report to Gold Standard (uploaded on GS Registry).	CCL has verified the same by referring to Markit Environmental Registry /B18-2/.
7.	13/12/2011	Verified Emission Reduction Purchase Agreement (VERPA) for the sale of carbon credits signed between AquaClara Foundation and ClimateCare Limited.	CCL has reviewed the Verified Emission Reduction Purchase Agreement (VERPA) for the sale of carbon credits signed between AquaClara Foundation and ClimateCare Limited (Dated 13/12/2011) /23/.
8.	02/01/2012	LSC Report listed on GS Registry.	CCL has verified the same by referring to Markit Environmental Registry /B18-2/. The same was further verified through review of Mail from Ms. Heba Rabie, Regional Manager – Middle East and Africa, The Gold Standard Foundation (Dated 03/01/2012) confirming that GS1078 is now Listed on the GS registry /63/.
9.	19/03/2012	GS Passport submitted to Gold Standard Foundation (uploaded on GS Registry).	CCL has verified the same by referring to Markit Environmental Registry /B18-2/.
10.	29/02/2012	Validation contract between the Aqua Clara Foundation and Carbon Check Limited.	CCL has reviewed the document /08/.
11.	27/08/2013	Validation work plan uploaded on GS registry.	CCL has verified the same by referring to Markit Environmental Registry /B18-2/.
12.	11/11/2013	Request for Registration submitted to Gold Standard Foundation	CCL has verified the same through review of mail from Mr. Nathan Gachugi, Project Manager – Viability Africa to Gold Standard Foundation (Dated 11/11/2013) requesting registration for project activity GS1078 /64/.

Validation team confirms that sufficient evidence has therefore been provided to demonstrate that real and continuing actions were taken to secure carbon revenue for the project activity in parallel with its implementation. The validation took cognizance of § 108 – 111 of VVS (Version 05.0) /B30/.



3.6.1 Additionality Tool

Additionality of the project activity has been demonstrated by using the guidance provided under Section 3 (paragraph 3) of the applied GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/.

The project activity doesn't use UNFCCC tool for the demonstration and assessment of additionality (version 07.0.0) /B15-1/.

3.6.2 Demonstration whether the proposed project activity is the first-of-its-kind

The proposed project activity involves sale and distribution of Bio Sand Filter (BSF) for households and the Sand and Membrane (SAM) large-scale filter for households and communities.

As per § 3, section 3 of the applied methodology /B01/ a project qualifies to be declared as 'first-of-its-kind' if:

“In situations where it can be shown that the project technology has been adopted by less than 20% of the population in the target area (as defined in section II, 1.b), the technology can be qualified as “first of its kind” and hence a realistic and credible barrier due to prevailing practice can be claimed.”

The methodology further states *“the demonstration must rely on existing credible sources of information or on a survey conducted specifically for the occasion by a third party within a sample representative enough of the overall population in the target region.”*

Demonstration of the conformity of the project activity to the above conditions requires defining the target area. These same is discussed in the following paragraph:

Target area: The target area for the project activity are the 23 counties of Republic of Kenya where the project will be implemented. The baseline scenario across all the counties has been assessed to be the existing kitchen practice of boiling water to treat water for consumption on stoves using non-renewable biomass, identified by the baseline study /52/. The same is in line with the definition of target area provided in section II, 1.b of applied methodology /B01/.

The second condition relates to demonstration of the situation that the project technology has been adopted by less than 20% of the population in the target area. The same has been discussed below:

PP in the PDD states that less than 20% of households have adopted point of use water treatment technologies based on the government of Kenya's Demographic Health Survey.

The same was verified through review of the report titled *“Kenya Demographic and Health Survey 2008-09 by Kenya National Bureau of Statistics Nairobi” /56/*, which in Table 2.6: Household drinking water (on page 21) illustrates that use of ceramic, sand or other filters for treatment of water among households in Kenya is much below 20%. The snapshot of the table from the report is provided below (relevant parameter has been highlighted in yellow).

Table 2.6 Household drinking water

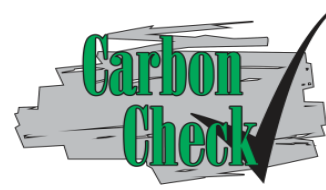
Percent distribution of households and de jure population by source, time to collect, and person who usually collects drinking water; and percentage of households and the de jure population by treatment of drinking water, according to residence, Kenya 2008-09

Characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source	89.3	53.8	63.0	89.7	53.1	60.2
Piped water into dwelling	22.8	4.7	9.4	24.4	3.5	7.5
Piped water into plot	33.1	9.0	15.2	30.7	7.5	12.0
Public tap/standpipe	19.8	6.1	9.7	21.3	6.2	9.1
Tube well or borehole	6.7	9.5	8.8	5.6	9.7	8.9
Protected dug well	4.7	11.6	9.8	5.1	12.9	11.4
Protected spring	1.6	10.2	8.0	1.9	11.0	9.2
Rainwater	0.6	2.7	2.2	0.7	2.4	2.1
Non-improved source	6.3	45.8	35.5	6.2	46.5	38.7
Unprotected dug well	1.3	6.2	4.9	1.5	6.4	5.5
Unprotected spring	0.9	7.2	5.6	1.0	7.7	6.4
Tanker truck/cart with small tank	2.1	1.1	1.3	1.8	1.1	1.2
Surface water	1.9	31.3	23.7	2.0	31.3	25.6
Bottled water, improved source for cooking/washing ¹	1.4	0.0	0.4	1.2	0.0	0.2
Bottled water, non-improved source for cooking/washing ¹	0.1	0.0	0.1	0.1	0.1	0.1
Other	2.8	0.4	1.0	2.7	0.3	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using any improved source of drinking water	90.8	53.8	63.4	91.0	53.1	60.4
Time to obtain drinking water (round trip)						
Water on premises	64.7	26.2	36.2	64.1	23.4	31.2
Less than 30 minutes	26.9	33.9	32.1	26.1	34.4	32.8
30 minutes or longer	6.3	39.3	30.7	7.8	41.9	35.3
Don't know/missing	2.2	0.5	1.0	2.1	0.4	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Person who usually collects drinking water						
Adult female 15+	21.5	58.0	48.5	24.9	64.3	56.7
Adult male 15+	9.8	9.1	9.2	6.6	5.4	5.7
Female child under age 15	0.7	3.9	3.1	0.9	4.5	3.8
Male child under age 15	0.3	1.9	1.5	0.4	1.8	1.6
Other	2.9	0.9	1.4	3.1	0.5	1.0
Water on premises	64.7	26.2	36.2	64.1	23.4	31.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Treatment of water²						
Boiled	38.0	25.4	28.6	37.6	24.0	26.6
Bleach/chlorine	21.5	16.3	17.6	22.9	17.0	18.2
Strained through cloth	0.3	1.5	1.2	0.4	1.7	1.4
Ceramic, sand, or other filter	1.7	0.5	0.8	1.6	0.6	0.8
Solar disinfection	0.0	0.2	0.1	0.0	0.2	0.1
Allowed to settle	0.2	0.5	0.4	0.1	0.4	0.4
Other	0.3	0.1	0.1	0.3	0.1	0.1
No treatment	42.5	59.1	54.8	42.1	59.7	56.3
Percentage using an appropriate treatment method ³	57.1	40.2	44.6	57.5	39.8	43.2
Number	2,350	6,707	9,057	7,365	30,704	38,069

¹ Because the quality of bottled water is not known, households using bottled water for drinking are classified as using an improved or non-improved source according to their water source for cooking and washing.

² Respondents may report multiple treatment methods, so the sum of treatment may exceed 100 percent.

³ Appropriate water treatment methods include boiling, bleaching, straining, filtering, and solar disinfecting.



Thus based on the review of the baseline study /52/ and the report “Kenya Demographic and Health Survey 2008-09 by Kenya National Bureau of Statistics Nairobi” /56/, the validation team confirms that all the requirements stipulated under Section 3 (paragraph 3) of the applied GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011) /B01/ have been fulfilled and the technology is “first of its kind” and faces a realistic and credible barrier due to prevailing practice. Hence, the project is additional.

In the above background, Validation Team concludes that the project activity is not a business-as-usual scenario and is additional. VER benefits, therefore, would enable the project activity to alleviate the risks associated with ‘first-of-its-kind’ barrier.

3.7 Sustainability Assessment and Environmental Impacts

The project has used the sustainable development indicators matrix as required by the Gold Standard. In order to qualify for Gold Standard registration, project activities must at a minimum contribute positively to two of the three categories and be neutral to the third category.

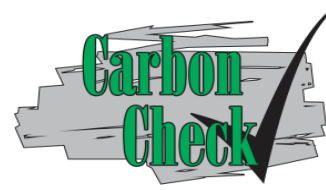
The total score obtained is a + 5, where:

- Local/regional/global environment has a subtotal of +2
- Social sustainability and development has a subtotal of +3
- Economic and technological development has a subtotal of 0

All the assumptions used to define the score values have been reviewed by the validator, based on submitted documentation and the on-site visit made during the validation of the project. During the OSV, the validation team assessed the appropriateness of scores assigned to every SD indicators through interview with local stakeholders from peri-urban and rural regions /v/, /vi/, /vii/, /viii/ where the project activity is to be implemented within the project boundary. Hence the project proponents have correctly demonstrated these criteria in a very conservative way without any overestimation of any of the indicators.

The GS Passport /05/ shows under section G all the parameters to be monitored. The monitoring process of every parameter is clearly explained in the GS Passport /05/. Hence the sustainability monitoring plan is plausible and verifiable if implemented as stated in the GS Passport. The data to be monitored ex-post are the following sustainable development indicators:

SI. No.	SD Indicator	Score	Chosen Parameter	Way of monitoring	Frequency
1.	Air quality	+	Measurement of user perceptions between old stove and new stove: smoke levels, incidence of coughing, incidence of respiratory illness, and incidence of itchy eyes	Monitoring surveys shall be designed to assess whether the respondents have noticed reduced levels of smoke levels, reduced incidence of coughing, reduced incidence of illness, reduced incidence of	Annually



				itchy eyes.	
2.	Water quality and quantity	+	Levels of coliforms:	Water Quality tests which will assess the levels of coliforms in samples of water taken from SAM and BSF units.	Annually
3.	Quality of Employment	+	Training manuals	Training manuals.	Every two years
4.	Livelihood of the poor	+	Money (and/or time) spent to collect fuel. The project activity monitoring report shall quantify the self-reported reduction in time used to collect fuel wood or the amount of money used to buy wood fuel and or charcoal.	Closed questionnaire interviews during monitoring surveys.	Annually
5.	Access to affordable and clean energy services	+	Change in Traditional fuel consumption (% of total energy requirements)	Total Sales Records	Annually.

The proposed project activity opts for retroactive crediting. However the PP was not able to conduct annual sustainable development monitoring and as such the frequency of monitoring for the SD indicators of the retroactively credited filters shall be biennially monitored in the first monitoring exercise and thereafter monitored annually. The same was approved through a mail (Dated 30/09/2013) from Johann Thaler (Technical Expert - African portfolio) of the GS Foundation /53/.

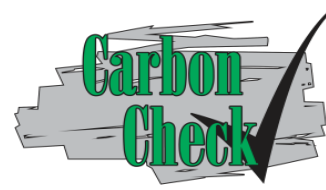
Forward Action Request (FAR 2): The verifying DOE shall assess and confirm that the monitoring of SD indicators for the retroactive crediting period has been done in accordance with sustainability monitoring plan stated in section G of the Gold Standard Passport.

These indicators are further described in the LSC Report and GS Passport, the monitoring is described in GS Passport.

Environmental Impacts:

It has been indicated in the PDD /02/ that project activity involves zero energy – Point of Use water filters and, as per Schedule 2 of Environment Management and Co-ordination Act (Act No. 8 of 1999), Republic of Kenya /27/; EIA is only required for a list activities. Water filtration project is not there in the list and hence exempted from conducting EIA.

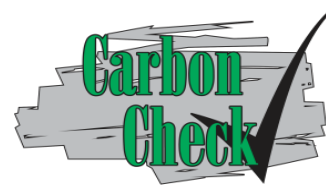
The validation team concludes that the project participant has not assessed the environmental impact by the project activity in accordance with Schedule 2 of Environment Management and Co-ordination Act (Act No. 8 of 1999), Republic of Kenya /27/, which doesn't require EIA for water filtration projects and the same is stated in the PDD. It is validation team's opinion that the project activity does not cause the adverse environmental impacts and there are no regulations or requirement by the host country to conduct the EIA for the project activity. The same is confirmed from the review of Schedule 2 of Environment Management and Co-ordination Act (Act No. 8 of 1999), Republic of Kenya /27/. The validation took cognizance of § 134 to §137 of VVS (version 05.0).



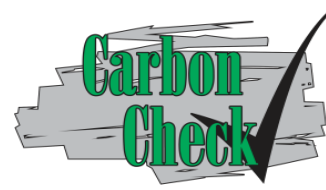
3.8 Pre-feasibility assessment

The project activity has completed the fast track process for retroactive registration and is listed on the GS website as a retroactive project /B18/. The fast-track checklist is provided below:

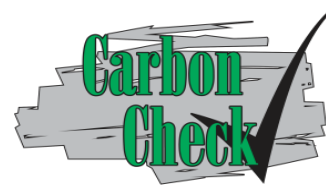
Sl. No.	Parameter	Assessment
1.	Eligibility	<p><u>Type of project activity:</u></p> <p>The Aqua Clara Water Filtration Program in Kenya is a water treatment project. The project applies the GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” (Version 1.0; Dated 11/04/2011)”. This methodology falls under the scope 1 (Energy industries (renewable - / non-renewable sources)) and 3 (Energy demand) and 13 (Waste handling and disposal) as per Gold Standard guidance.</p> <p>The Aqua Clara Water Filtration Program in Kenya project falls under the project type “Improved distributed heating and cooking devices (e.g. biogasifiers, cook-stoves), and distributed micro-scale electricity generation units (e.g. microhydro and PV for households)” as per Annex C of GS Toolkit (Version 2.1; dated 01/07/20019) /B03/. Gold Standard requires projects of this type to provide a clear description of the transfer of credits ownership all along the investment chain, and with proof that the end users are aware of and willing to give up their rights on emission reductions. The project developer has provided 3 agreements between Aqua Clara International and end users of the water filters accepting the transfer of credit ownership /29/. The same was found to be appropriate by the validation team.</p> <p>Forward Action Request (FAR) 1: During first verification the verifying DOE shall verify and confirm VER transfer (waiver of carbon rights by end users of the technology) involving indirect communication mechanism i.e., through county representatives and village chiefs, The verifying DOE shall also verify how the end users of the technology were informed about waiving off their carbon rights by county representatives and village chiefs.</p> <p><u>Project Gases:</u></p> <p>The project involves the distribution of ACF Bio Sand Filter (BSF) and the Sand and Membrane (SAM) household as well as community based water purification system and will replace the current water treatment practice in counties of Kenya, which is boiling of water using non-renewable biomass (NRB). The proposed project will reduce the burning of non-renewable biomass for boiling of water thus leading to emission reduction of 1, 21, 896 tCO₂e annually. Hence in accordance with section III.c.1 of the GS</p>



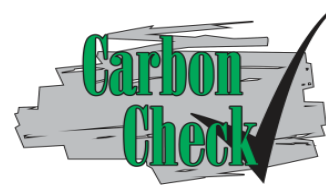
	<p>Requirements /B02/, the project is eligible under Gold Standard.</p> <p><u>Host Country:</u></p> <p>Republic of Kenya is the host country for the proposed project activity. The Host country does not have a quantitative reduction target under the Kyoto Protocol. Kenya acceded to UNFCCC on 25/02/2005 and ratified the Kyoto Protocol on 26/05/2005 (http://maindb.unfccc.int/public/country.pl?country=KE). Republic of Kenya is listed as non-Annex-I country to the UNFCCC.</p> <p>Therefore, according to section III.b.3 of the GS Requirements /B02/, Republic of Kenya is eligible as host country for Gold Standard VER Projects and can participate efficiently in the GS VER programme. No retirement of AAUs is necessary at this point.</p> <p><u>Project timeframe:</u></p> <p>It has been stated in the section C.3 of GS Passport /05/ that no previous announcement of the project had been made. The project applies for a retroactive registration since the start date of the project activity is before the time of first submission to GS and before registration. As per the PDD, the project is applied for a fixed crediting period of 10 years.</p> <p><u>Applicability of methodology:</u></p> <p>The project applies Gold Standard's approved methodology titled "Technologies and Practices to Displace Decentralized Thermal Energy Consumption" (Version 1.0; Dated 11/04/2011) for VER projects. Detailed assessment of the applicability has been provided above in section 3.5.2.</p> <p><u>Project Scale:</u></p> <p>According to section III.e.2.1 of the GS Requirements /B02/ the threshold for large-scale or small-scale GS VER project activity is defined in accordance with UNFCCC rules. The project results in emission reduction of 1, 21, 896 tCO₂e annually, which is higher than the threshold of 60kt CO₂ equivalent annually for type III projects as per CMP 2, § 28 for small-scale thresholds. Hence the proposed project activity is a large-scale project under UNFCCC rules. The PP has also used the large-scale UNFCCC PDD template for the project activity. Furthermore, the PP has correctly identified the project as large-scale in section C.1 of the final GS Passport /05/.</p> <p><u>ODA:</u></p> <p>During the validation process, the validation team did</p>
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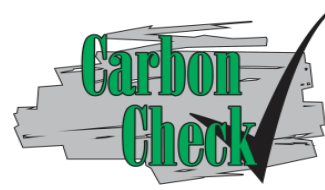
		<p>not find that there was any diversion of official development assistance (ODA) funding due to the proposed project activity. The project participant has submitted an authorised ODA Declaration to the Gold Standard Foundation /07/. The declaration contains all elements of the ODA Declaration Template, i.e. Annex D /B10/ of the GS Toolkit /B03/. The declaration is included in Annex 1 of the final GS Passport /05/. The PP has also submitted financial statements /24/ of last three years i.e., 2009-10, 1010-11, 2011-12 of Aqua Clara International.</p> <p>Hence in accordance with section III.g.1 of the GS Requirements /B02/, the project is eligible under Gold Standard.</p> <p><u>Projects related to other schemes:</u></p> <p>It is confirmed through onsite interviews /i/, /ii/ and review of Letter from ACF confirming exclusive inclusion of Sand and Membrane (SAM) Filters /13-a/ and Bio Sand Filters (BSF) /13-b/ that the project activity does not take part in any other certification schemes for credits related to the GHGs abated from the project activity.</p> <p><u>Pre-CDM VERs:</u></p> <p>It is confirmed through onsite interviews /i/, /ii/ and review of Letter from ACF confirming exclusive inclusion of Sand and Membrane (SAM) Filters /13-a/ and Bio Sand Filters (BSF) /13-b/ that the project activity does not claim any pre-CDM VERs.</p> <p>Programme of Activities (PoA):</p> <p>It is confirmed through onsite interviews /i/, /ii/ and review of GS registry website /B18/ that the proposed project activity is not a PoA.</p>
2.	Additionality	<p>It is confirmed by the validation team that the additionality has been demonstrated in the section B.5 of PDD /02/.</p> <p>Detailed assessment of the additionality is provided above in section 3.6.</p>
3.	Baseline and Project Emission Reductions	<p>Baseline scenario has been clearly defined in the PDD. Baseline emissions and Project emissions have been calculated appropriately in accordance with the applied methodology. The PDD /02/ clearly addresses all the involved emissions.</p> <p>Detailed assessment of the baseline and project emissions is provided above in section 3.4 and 3.5.</p>
4.	Sustainable Development Assessment	<p><u>Do No Harm Assessment:</u></p> <p>Assessment of all the 11 safeguarding principles has been provided in the GS Passport /05/. The assessment has been performed in accordance to</p>



	<p>requirements prescribed in the GS Toolkit's (Version 2.1) Section 2.4 /B03/, & Safeguarding Principles – guiding questions as listed in Annex H /B06/. All supporting information & reference sources stated in the GS Passport in order to support the assessment have been verified by the validation team & confirmed the assessment has been carried out based on accurate information. All of 11 Safeguarding Principles were evaluated and assessed as low risk. There is no mitigation measure identified and was found to be adequate & appropriate to address the risk by the validation team.</p> <p><u>Sustainable Development Matrix:</u></p> <p>Sustainable development matrix has been provided in section F.2 of the Passport /05/. Scoring has been provided against all 12 indicators. The validation team has assessed appropriateness of the scoring. The 12 sustainable development indicators fall under three categories; Environment, Social Development and Economic and Technological Development as defined by the Gold Standard. Air quality, Water quality and quantity falling under Environment category have been scored positive (+). Quality of employment, Livelihood of the poor and Access to affordable and clean energy services falling under Social Development category have also been scored positive.</p> <p>Other indicators on which the project activity does not have any impact have been scored zero.</p> <p>Detailed assessment on sustainable development matrix has been provided in above sections.</p> <p><u>Stakeholder Consultation:</u></p> <p><u>GS Stakeholder Consultation:</u></p> <p>The initial or first round of stakeholder consultation meeting was held on 07/05/2011.</p> <p>Since the project is applying for retroactive registration, 'local stakeholder consultation' is not relevant. It is also in line with the GS Pre-feasibility Assessment Checklist for Retroactive Projects (GSv2.1).</p> <p>Therefore, Stakeholder Feedback Round (SFR) was initiated on 26/10/2012. It involved contacting all the participants who were present at the Local Stakeholders consultation live meeting telephonically and informing them where the printed revised PDD, Passport and LSC Report documents were publicly placed.</p> <p>Based on the SFR description provided in section E.2 of the GS passport /05/, it is confirmed that it has been prepared according to Annex Q of GS Toolkit /B03/.</p>
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		The information provided in LSC report is deemed appropriate.
5.	Monitoring	<p><u>Monitoring plan in the PDD:</u></p> <p>Validation team confirms that monitoring plan in the PDD /02/ and the GS passport /05/ sufficiently describes all the parameters in line with the requirements of the applied monitoring methodology and the GS sustainability monitoring parameters as well.</p> <p>Detailed assessment of the monitoring plan has been provided above in section 3.5.2.1 and 3.5.2.2 .</p> <p>All non-neutral indicators have been included in the Sustainability monitoring plan. As there is no negative (-) scoring indicator, no mitigation measures are required. It is the opinion of validation team that the chosen indicators for monitoring are appropriate.</p>
6.	Other	<p><u>Double Counting:</u></p> <p>It is confirmed through onsite interviews /i/, /ii/ and review of Letter from ACF confirming exclusive inclusion of Sand and Membrane (SAM) Filters /13-a/ and Bio Sand Filters (BSF) /13-b/ that the project activity does not take part in any other certification schemes for credits related to the GHGs abated from the project activity.</p> <p><u>Credit ownership:</u></p> <p>The Aqua Clara Water Filtration Program in Kenya project falls under the project type “Improved distributed heating and cooking devices (e.g. biodigesters, cook-stoves), and distributed micro-scale electricity generation units (e.g. microhydro and PV for households)” as per Annex C of GS Toolkit (Version 2.1; dated 01/07/20019) /B03/. Gold Standard requires projects of this type to provide a clear description of the transfer of credits ownership all along the investment chain, and with proof that the end users are aware of and willing to give up their rights on emission reductions. The project developer has provided 3 agreements between Aqua Clara International and end users of the water filters accepting the transfer of credit ownership /29/. The same was found to be appropriate by the validation team.</p> <p>Forward Action Request (FAR) 1: During first verification the verifying DOE shall verify and confirm VER transfer (waiver of carbon rights by end users of the technology) involving indirect communication mechanism i.e., through county representatives and village chiefs, The verifying DOE shall also verify how the end users of the technology were informed about waiving off their carbon rights by county representatives and village chiefs.</p>



		<p><u>Special Procedures for Conflict Zones and Refugee Camps:</u></p> <p>N/A</p>
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4. LOCAL STAKEHOLDER CONSULTATION

The Local Stakeholder Consultation was held on May 7th 2011 at 10.00 AM at Kipsinende Township Primary school in Uasin Gishu County. There were 46 participants in the meeting /49/. Local stakeholder consultation has been performed according to the more stringent GS requirements, as further detailed in the project’s Local Stakeholder Consultation Report /10/. Local stakeholders were identified by PP who invited stakeholders invited using emails; personal invitations, phone calls and public advertisements employed using posters. Word of mouth through school children was used to reach stakeholders who didn’t have access to the posters to ensure maximum stakeholder participation. All stakeholders receiving a personal invitation were provided with a brief summary of the project as well.

The comments received are reported in the PDD /02/ and in the LSC Report /10/. No comment received during the LSC required modifications of any aspects of the project.

LSC feedback round was initiated on 26/10/2012 and there was no closing date fixed to indicate that SFR will be over by that date. It involved contacting all the participants who were present at the Local Stakeholders consultation live meeting telephonically and informing them where the printed revised PDD, Passport and LSC Report documents were publicly placed. Project documents viz., LSC report, Passport and PDD were made available at the head offices of the client. These locations were considered as publicly available as PP’s offices are located at the local administrative offices of the area e.g., in Kisii, the PP’s head office is located at the district commissioner’s head office. Based on the SFR description provided in section E.2 of the GS passport /05/, it is confirmed that SFR has been conducted in accordance with requirements of Annex Q /B11/ of GS Toolkit /B03/.

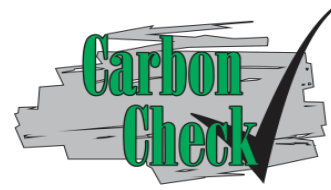
The reports of the local stakeholder meetings and the stakeholder feedback round and related responses of the project participants have been reviewed by validation team and deemed adequate and transparent. There were no adverse comments regarding the project activity from the stakeholders during the SFR and comments are overall of positive nature and are not resulting in a need for a re-design of the project activity. The same was validated through telephonic interviews with stakeholders. Assessed by the validation team through review of GS Passport /05/ and interview with representatives of PP. A global stakeholder consultation is not requested for voluntary offset projects under GS-VER standard.

No further written comments have been received so far. Hence the validation team confirms that the local stakeholder consultation carried out adequately and the requirements for local stakeholder process for Gold Standard projects have been fulfilled.

5. COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

An international stakeholder consultation as in the CDM is not required for projects under the GS VER stream (Source: Gold Standard Rules and Procedures Updates and Clarifications, Basel, December 17th 2007). However, the project documents were made publicly available for global stakeholder consultation process for the GS-VER project activity.

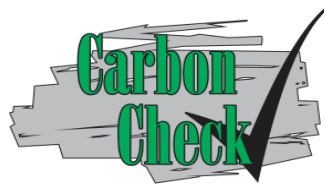
The PDD version 01 of “11/01/2011” was made publicly available for global stakeholder consultation on GS website from “20/09/2011” to “20/11/2011” in order to invite comments



from public stakeholders. The PDD was published prior to commencement of the validation and the validation team has taken a due note on the outcome of its result.

No public comments have been received during that period.

Comment by: <input type="checkbox"/> Accredited NGO <input type="checkbox"/> Party <input type="checkbox"/> Stakeholder
Provided on:
Subject:
Comment: No comment was received during the global stakeholder consultation project.



APPENDIX A

**Carbon Check
Gold Standard Validation Protocol**

**Aqua Clara Water Filtration Program in Kenya
in Republic of Kenya**

Report No. CCL0138/ACWPP/22022012

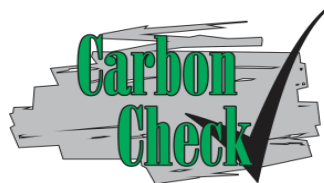
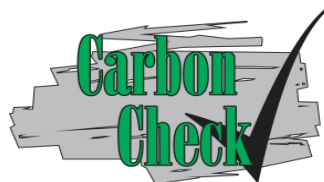
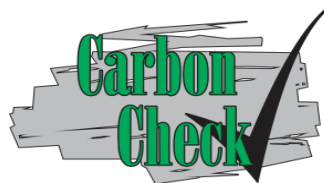


Table 1: Validation Requirement (based on GS Requirements Version 2.2 and GS Toolkit version 2.2 and applicable CDM Modalities and Procedures and on CDM Validation and Verification Standard version 03.0)

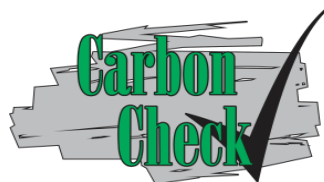
CHECKLIST QUESTION	REF.	MoV	COMMENTS	Draft Conclusion	Final Conclusion
A - GENERAL DESCRIPTION OF THE PROJECT ACTIVITY					
A.1. Title and version of the Project Activity and Project Cycle					
A.1.1. Does the proposed project title clearly enable to identify the unique GS project activity?	/01/	DR	<p>The title “Aqua Clara Water Purification Project”, as stated in Section A.1. of the PDD is not similar as the title stated on the GS Registry “Aqua Clara Water Filtration Program in Kenya”, thus not allowing for identification of the unique GS project activity. Hence CL has been raised.</p> <p>CL 1: The project participant is requested to clarify the correct title of the project activity.</p>	CL-4	OK
A.1.2. Does the PDD enable identification of its revision number and the date of revision?	/01/	DR	<p>The PDD, submitted to the DOE for validation is as of the 5th of March 2012; however the PDD uploaded onto the GS Registry is as of 11 January 2011. Both are indicated to be version 01. It is not clear which date is correct and which is the version accordingly, hence a CL has been raised.</p> <p>CL 2: The project participant is requested to clarify the date of the complete PDD and its version for validation by the DOE.</p>	CL-2	OK



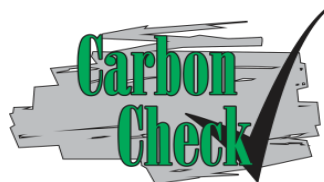
A.1.3. Are revision number and date of completion of final PDD consistent with the project activity's timeline?	/01/	DR	Depending on closure of CL 2 in section A.1.2. above.	Refer CL 2	OK
A.1.4. Has the correct project cycle been applied?	/01/	DR	Referring sections A.1.4.1. and A.1.4.2. below; the start date of the project activity appears to be the same date as the time of first submission. Hence a CL has been raised. CL 3: The project participant is requested to clarify on the start date of the project activity through submission of supporting evidence thereof.	CL 3	OK
A.1.4.1. What is the date of time of first submission?		DR	The date of time of first submission is the 20/09/2011.	OK	OK
A.1.4.2. What is the start date of the project activity?	/01/	DR	As stated in Section C.1.1. of the PDD, the start date of the project activity is 20/09/2011. Refer CL 3 in section A.1.4.1. above.	Refer CL 3	OK
A.1.4.3. Have all documents required by the applicable project cycle been submitted for validation?		DR	As per requirement of the regular project cycle, the following documents have been submitted for validation: PDD, Passport, LSC report, EIA approval letter, ODA declaration, ER calculations.	OK	OK
A.2. Description of the Project Activity					
A.2.1. Is the description delivering a transparent overview of the Project Activity?	/01/	DR	As stated in Section A.2. of the PDD, the purpose of the project activity is to displace the use of firewood	OK	OK



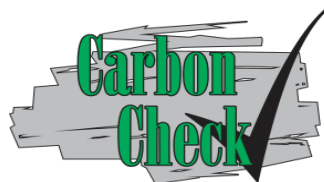
			<p>traditionally used to boil water for domestic consumption by the introduction of Bio Sand Filters and the Sand and Membrane large-scale filter as a means to purify water for consumption-purposes.</p> <p>The proposed project activity aims at introducing approximately 17,000 BSF-filters in rural and peri-urban Kenya and 3 SAM filters which combined are to reduce approximately 1,21,896 tCO₂e annually.</p> <p>The pre-project scenario is boiling water as a means of purification or the consumption of non-purified</p>		
A.2.2. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?		I	During site visit it was observed that the samples Reviewed are matching the description as presented in the PDD.	OK	OK
A.2.3. Is all information provided consistent with details provided in further chapters of the PDD?	/01/	DR	The description of the project activity is consistent Throughout the PDD.	OK	OK
A.3. Parties and Project Participants					
A.3.2. Has/have the country(ies) and project participant(s), participating in the project activity, been listed in tabular form in Section A.3 of the PDD and are they consistent with the information detailed in its Annex 1?	/01/	DR	As listed in tabular form in Section A.3. of the PDD, The Republic of Kenya has been identified as being the host country and “Aqua Clara Foundation” has been identified as the project participant, which is consistent with the contact details provided in Annex 1 of the PDD.	OK	OK
A.4. Technical Description of the Project Activity and Gold Standard Eligibility					



A.4.1. Has the project location been clearly defined?	/01/	DR	As stated in Section A.4.1. of the PDD, the location of the project activity is within the territorial limits of the Republic of Kenya and as stated in Section A.4.1.3. and A.4.1.4. of the PDD, the primary Target Area consists of the following counties: Nandi, Uasin Gishu, Kisii, Nyamira, Nakuru, Muranga, Bomet, Homa Bay, Migori, Kisumu, Kirinyaga, Embu, Kericho, Elgeyo, Kakamega, Siaya, Nyeri, Makeni, Busia, Bungoma, Trans Nzoia, Machakos, Nairobi.	OK	OK
A.4.2. Has the category of the project activity been correctly identified?	/01/	DR	The project activity reduces the amount of energy required to produce safe drinking water, thus the project activity can be categorised as being an End-use Energy Efficiency Improvement project as per Gold Standard requirements.	OK	OK
A.4.3. Does the project design engineering reflect current good practices?	/01/	DR	The main purpose of the project activity is to deliver safe drinking water to households in rural and peri-urban Kenya. This is safeguarded by annually monitoring the quality of the water as a % removal of MPN of coliforms organism per 100 ml, performed by third party national water testing laboratories based on international testing protocols. The third party water testing has been confirmed during site visit, however supporting documentation such as laboratory test-results have not been submitted to DOE for validation, hence a CL has been raised. CL 4: The project participant is requested to substantiate that the quality of the water treated by the project technology is equal to or better than the quality of the drinking water in the pre-project scenario, by submission of e.g. laboratory test-results.	CL-4	OK



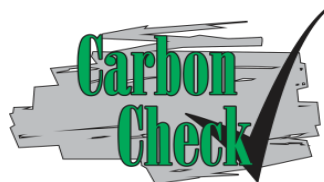
A.4.4. Does the description of the technology to be applied provide sufficient and transparent input to evaluate its impact on the greenhouse gas balance and is the explanation how the project will reduce greenhouse gas emission transparent and suitable?	/01/	DR	Due to the project activity greenhouse gas emissions are reduced as GHG emitting technology is being replaced by zero-emission technology. This will result in approximately 1,21,896 tCO ₂ e annually.	OK	OK
A.4.5. Is all information provided in compliance with the actual situation or planning as available by the project participants?		I	During site visit it has been observed that all information provided is in compliance with the actual situation.	OK	OK
A.4.6. Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	/01/	DR	As stated in Section A.4.3. of the PDD: several point-of-use water purification technologies are available in Kenya, including boiling, chlorination, solar disinfection and flocculent-disinfectants. The technologies, introduced by the project activity, are an emerging purification method.	OK	OK
A.4.7. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	/01/	DR	Refer section A.4.6. above.	OK	OK



A.4.8. Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?	/01/	DR, I	<p>As stated in Section B.4. of the PDD, maintenance of the BSF is relatively simple as it only requires that the consumer cleans the filter once or twice a year depending on the turbidity of the water. This simple procedure will guarantee the consumer continued filtration throughout the lifespan of the BSF unit of 10 years. The first maintenance check is done by the installer of the BSF unit, who has received training from the project participant, followed by a demonstration of the maintenance.</p> <p>Maintenance of the SAM-filters is done by the</p>	OK	OK
A.4.9. Does the project make provisions for meeting training and maintenance needs?	/01/	DR, I	Refer section A.4.8. above.	OK	OK
A.4.10. Is a schedule available on the implementation of the project and are there any risks for delays?	/26/	DR	A "Project Implementation Schedule" has not been submitted for validation. However, based on the fragmented nature of the project activity delays are not likely to significantly impact the GHG emissions reduced during the crediting period.	OK	OK
A.4.11. Is the table required for the indication of projected emission reductions correctly applied?	/01/	DR	<p>The presentation of the average estimated CO₂ emission reductions does not reflect a conservative approach as decimals have been used. Hence a CAR has been raised.</p> <p>CAR 1: The table in Section A.4.4. of the PDD does not indicate that the principle of conservativeness has been applied when establishing the estimation of average CO₂ emission reductions over the crediting period.</p>	CAR 1	OK



A.4.12. Is the project activity eligible for The Gold Standard?	/01/	DR	Refer section A.4.2. above, the project activity is eligible for The Gold Standard.	OK	OK
A.4.13. Is a cap & trade scheme applicable in the project activity's host country and if so, have arrangements been made to cancel allowances?	/01/	DR	The Republic of Kenya does not have a cap on GHG emissions, thus additional requirements are not applicable.	OK	OK
A.4.14. Are additional specific eligibility criteria applicable to the project activity?	/01/	DR	According to Annex C of the Toolkit, additional eligibility criteria have not been specified for the proposed type of project activity. Hence this criterion has been fulfilled.	OK	OK
A.4.15. Does the project activity reduce any of the applicable GHG under The Gold Standard scheme?	/01/	DR	The technology introduced by the project activity (i.e. zero-emission-water-filters) displaces the need for burning of firewood for boiling water as a means of purification, hence reducing CO2-emissions associated with this wood-burning. CO2 is one of the GHG eligible under The Gold Standard.	OK	OK
A.4.16. Does the project receive ODA and if so, are the credits coming out of the project transferred to the donor country?	/01/	DR	As stated in Section A.4.5. of the PDD, the project activity does not receive nor will it receive any public funding. However a Financing Plan/other evidence to substantiate and confirm this, has not been submitted to the DOE for validation. Hence a CAR has been raised. CAR 2: A Financing Plan or other evidence has not been submitted for validation thus not enabling DOE to assess compliance with the requirement that diversion of ODA is not applicable.	CAR 2	OK
A.4.17. Has the correct project cycle been applied?	/01/	DR	Refer section A.1.4. above, hence depending on closure of CL 3.	Refer CL 3	OK



A.4.18. Has the project activity been registered under different certification schemes?	/01/	DR, I	The project activity with the title “Aqua Clara Water Purification Project” has been put forward for registration as a Gold Standard project only and registration to other schemes have not been planned, as confirmed during interview with project participant.	OK	OK
A.4.19. Has Gold Standard Applicant Status been provided to this project activity by Gold Standard?	/01/	DR	The LSC report has been uploaded onto the GS Registry on the 2nd January 2012. The project activity has reached the status “listed” on the GS Registry, indicating that formal approval has been granted and that formal Gold Standard Applicant Status has been reached.	OK	OK
A.5. Public Funding					
A.5.1. Does the information on public funding, including ODA, conform to the actual situation or planning as presented by the project			Refer section A.4.16. above, hence depending on closure of CAR 2.	Refer CAR 2	OK
A.5.2. Is all information provided consistent with details provided by further chapters of the PDD (in particular annex 2)?	/01/	DR	Information provided on public funding is consistent with Annex 2 of the PDD. Referring sections A.4.16. and A.5.1. above, hence depending on closure of CAR	Refer CAR 2	OK
A.5.3. In case of public funding from Annex I Parties, is it confirmed that such funding does not result in a diversion of official development	/01/	DR	Refer section A.4.16. above, hence depending on closure of CAR 2.	Refer CAR 2	OK
A.5.4. Has a clear and transparent financing plan been completed and submitted with the GS-PDD?	/01/	DR	Refer section A.4.16. above, hence depending on closure of CAR 2.	Refer CAR 2	OK
A.5.5. Is there any ODA involved? If yes, has it been confirmed that the credits coming out of the project are not transferred to the donor	/01/	DR	Refer section A.4.16. above, hence depending on closure of CAR 2.	Refer CAR 2	OK
B - BASELINE AND MONITORING METHODOLOGY					
B.1. Choice and Applicability of the Applied Methodology					



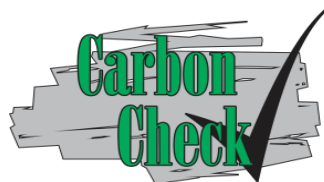
B.1.1. Has an approved methodology been applied and the correct version thereof?	/01/	DR	As stated in Section B.1. of the PDD and as per the Gold Standard website, the Gold Standard approved methodology “Technologies and Practices to Displace Decentralised Thermal Energy Consumption” has been applied. As only one version has been made available it has been concluded that the correct version has been applied.	OK	OK
B.1.2. Is the project activity in conformance with the applicability conditions of the methodology?	/01/	DR, I	The project activity is not in conformance with the applicability conditions of the applied methodology. Refer sections B.1.2.1. to B.1.2.9. below, hence depending on closure of CL 5 and CARs 3, 4, 5, 6 and 7.	Refer CL 5 & CAR 3, 4, 5, 6 and 7	OK
B.1.2.1. This methodology is applicable to programs or activities introducing technologies and/or practices that reduce or displace greenhouse gas (GHG) emissions from the thermal energy consumption of households and non-domestic premises.	/01/	DR	The project activity introduces point of use and point of entry water purification technology which will reduce greenhouse gas emissions associated with purification of consumption-water for households by replacing usage of fuel wood traditionally used to boil water as a means of purification thereof. Hence the project activity conforms to the requirement stated left.	OK	OK



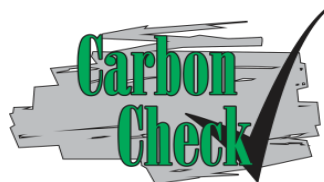
<p>B.1.2.2. (condition 1 as per Section I: Source and Applicability of the applied methodology) The project boundary can be clearly identified, and the technologies counted in the project are not included in another voluntary market or CDM project activity (i.e. no double counting takes place). Project proponents must have a survey mechanism in place together with appropriate mitigation measures so as to prevent double-counting in case of another similar activity with some of the target area in common.</p>	/01/	DR	<p>Regarding the BSF-filter: as per the table in Section B.2. of the PDD; the project boundary is defined as the domestic household in which the Bio Sand Filter is installed. And the primary Target Area has been clearly defined in Section A.4.1.3. of the PDD: 23 counties (see section A.4.1. above) within the geographical boundary of the project activity; The Republic of Kenya. In addition a unique water filter number is assigned to each filter and linked to an electronic database to aid preventing double-counting. The project participant states that no other Water Filtration Project is currently under way in the target area, however this has not been substantiated. Hence a CL has been raised.</p> <p>Regarding the SAM-filter: as stated in Section B.4. of the PDD; the project boundary is the local communities within which a SAM-filter is installed and treated water is consumed. However it has not been specified how double counting is being prevented, hence a CAR has been raised.</p> <p>CL 5: The project participant is requested to substantiate its statement in the table in Section B.2. that currently there are no other Water Filtration Projects undertaken in the target area.</p> <p>CAR 3: Preventing of double counting in case of the SAM-filter has not been clearly described and therefore condition 1 of the applied methodology has not been met.</p>	<p>CL 5 CAR 3</p>	OK
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<p>B.1.2.3. (condition 2 as per Section I: Source and Applicability of the applied methodology) The technologies each have continuous useful energy outputs of less than 150kW per unit (defined as total energy delivered usefully from start to end of operation of a unit divided by time of operation). For technologies or practices that do not deliver thermal energy in the project scenario but only displace thermal energy supplied in the baseline scenario, the 150kW threshold applies to the displaced baseline technology.</p>	/01/	DR, I	<p>Regarding the SAM-filter: it has not been addressed in the PDD how the 150 kW threshold will not be exceeded. Hence a CAR has been raised.</p> <p>CAR 4: Condition 2 of the applied methodology has not been addressed in the PDD.</p>	CAR 4	OK
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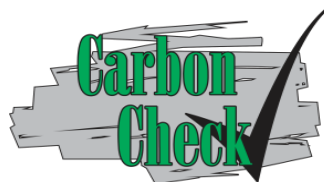
<p>B.1.2.4. (condition 3 as per Section I: Source and Applicability of the applied methodology) The use of the baseline technology as a backup or auxiliary technology in parallel with the improved technology introduced by the project activity is permitted as long as a mechanism is put into place to encourage the removal of the old technology (e.g discounted price for the improved technology) and the definitive discontinuity of its use. The project documentation must provide a clear description of the approach chosen and the monitoring plan must allow for a good understanding of the extent to which the baseline technology is still in use after the introduction of the improved technology, whether the existing baseline technology is not surrendered at the time of the introduction of the improved technology, or whether a new baseline technology is acquired and put to use by targeted end users during the project crediting period – see section III. The success of the mechanism put into place must therefore be monitored, and the approach must be adjusted if proven unsuccessful. If an old technology remains in use in parallel with the improved technology, corresponding emissions must of course be accounted for as part of the project emissions – see section II.5.</p>	/01/	DR	<p>It has not been demonstrated in the PDD how the project activity is meeting the requirements as laid down in the applicability condition number 3 of the applied methodology. Hence a CAR has been raised.</p> <p>CAR 5: Condition 3 of the applied methodology has not been addressed in the PDD.</p>	CAR-5	OK
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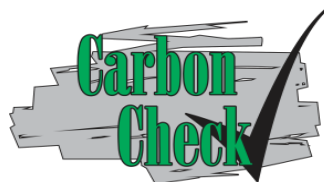
<p>B.1.2.5. (condition 4 as per Section I: Source and Applicability of the applied methodology) The project proponent must clearly communicate to all project participants the entity that is claiming ownership rights of and selling the emission reductions resulting from the project activity. This must be communicated to the technology producers and the retailers of the improved technology or the renewable fuel in use in the project situation by contract or clear written assertions in the transaction paperwork, If the claimants are not the project technology end users, the end users should be notified that they cannot claim for emission reductions from the project.</p>	/01/ /10/	DR	<p>It has not been demonstrated in the PDD how the project activity is meeting the requirements as laid down in the applicability condition number 4 of the applied methodology. Hence a CAR has been raised.</p> <p>CAR 6: Condition 4 of the applied methodology has not been addressed in the PDD.</p>	CAR-6	OK
<p>B.1.2.6. (condition 5 as per Section I: Source and Applicability of the applied methodology) Project activities making use of a new biomass feedstock in the project situation (e.g. shift from non-renewable to green charcoal, plant oil or renewable biomass briquettes) must comply with relevant Gold Standard specific requirements for biomass related project activities, as defined in the latest version of the Gold Standard rules⁷. If the biomass feedstock is sourced from a dedicated plantation, these criteria must apply to both plantations established for the project activity AND existing plantations that were established in the context of other activities but will supply biomass feedstock.</p>	/01/	DR	<p>It has not been demonstrated in the PDD how the project activity is meeting the requirements as laid down in the applicability condition number 5 of the applied methodology. Hence a CAR has been raised.</p> <p>CAR 7: Condition 5 of the applied methodology has not been addressed in the PDD.</p>	CAR-7	OK



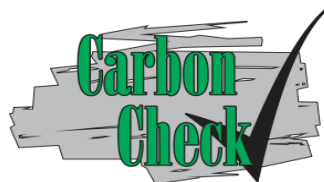
<p>B.1.2.7. (condition 5a as per Section I: Source and Applicability of the applied methodology) Adequate evidence is supplied to demonstrate that indoor air pollution (IAP) levels are not worsened compared to the baseline, and greenhouse gases (as listed in section II.1) emitted by the project fuel/stove combination are estimated with adequate precision. The project fuel/stove combination may include instances in which the project stove is a baseline stove.</p>	/01/	DR	<p>This applicability condition is not relevant as the project scenario does not contain a fuel/stove combination.</p>	N/A	OK
<p>B.1.2.8. (condition 5b as per Section I: Source and Applicability of the applied methodology) Records of renewable fuel sales may not be used as sole parameters for emission reduction calculation, but may be used as data informing the equations in section II of this methodology if correlated to data on distribution and results of field tests and surveys confirming (a) actual use of the renewable fuel and usage patterns such as average fraction of non-renewable fuels used in mixed combustion or seasonal variation of fuel types, (b) GHG emissions, (c) evidence of CO levels not deteriorating (d) any further factors effecting emission reductions significantly.</p>	/01/	DR	<p>This applicability condition is not relevant as the project scenario does not contain a fuel/stove combination.</p>	N/A	OK



B.1.2.9. (applicability condition as per Annex 3: Application of the methodology to safe water supply project scenarios of the applied methodology) Only end users that boil water or are currently using unsafe water are eligible for crediting.	/01/	DR	In Section B.2. of the PDD, it has been described that within the primary Target Area as referred in Section A.4.1.3. of the PDD, customers have limited access to piped clean water. Hence only customers that depended on boiling water as the only water treatment technology available to them are included in the baseline scenario as the number of people who had previous access to clean drinking water has been discounted from the crediting.	OK	OK
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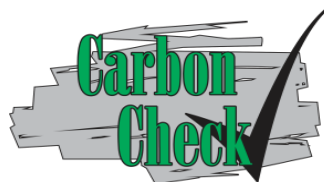
<p>B.1.3. Is the selected baseline one of the baseline(s) described in the methodology and this hence confirms the applicability of the methodology?</p>	<p>/01/</p>	<p>DR</p>	<p>As stated in Section B.4. of the PDD, Annex 3 of the applied Gold Standard approved methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” describes the application of the methodology to water treatment project activities.</p> <p>Accordingly the baseline scenario has been identified as the existing kitchen practice of boiling water to treat for consumption on stoves using high emission fuels including non-renewable biomass and fossil fuels. Thus confirming the applicability of the methodology.</p> <p>However Sections B.3. and B.4. of the PDD are not consistent in definition of the baseline as in B.3. the baseline is defined as “the existing kitchen practice of boiling water to treat water for consumption on stoves using non-renewable biomass (firewood)” and in B.4. the baseline is defined as “the existing kitchen practice of boiling water to treat for consumption on stoves using high emission fuels including non-renewable biomass and fossil fuels”. Hence it is not clear which types of fuels are included in the baseline scenario thus a CL has been raised.</p> <p>CL 6: The project participant is requested to clarify which are the types of fuel included in the baseline scenario.</p>	<p>CL-6</p>	<p>OK</p>
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B.1.4. Has the choice for the applied methodology been justified and is the project activity conforming to all applicability conditions as per the applied methodology?	/01/	DR	The choice for the applied methodology has not been justified in a conclusive manner by demonstrating that all applicability conditions have either been met or are else not relevant.	Refer CL 5 and CARs 3, 4, 5, 6 and 7.	OK
B.2. Project Boundary					
B.2.1. Has the project boundary area been clearly defined and in accordance with the applied methodology?	/01/	DR	As per the applied methodology, definition of the project boundary includes definition of target area and fuel production and collection area. Hence refer sections B.2.1.1. – B.2.1.3. below.	OK	OK
B.2.1.1. Has the project boundary been clearly defined?	/01/	DR	In Section B.3. of the PDD, the project boundary has been defined as the domestic household in which the point of use ACF Bio-sand water filter is installed and used to treat water, and the local communities within which an ACF SAM filter is installed and treated water is consumed. This is according to the applied methodology, which defines the project boundary as the physical, geographical sites of the project technology and potentially of the baseline.	OK	OK
B.2.1.2. Has the target area been clearly defined?	/01/	DR	In Section B.3. of the PDD, the target area has been defined as the counties, towns and communities where the project activity is being implemented. This is according to the applied methodology which defines the target area as the regions where the considered baseline scenario(s) is (are) assessed to be uniform across political borders, thus providing an outer limit to the project boundary.	OK	OK



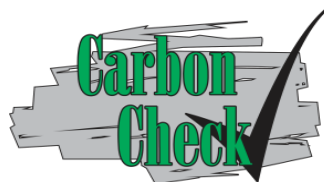
B.2.1.3. Has the fuel production and collection area been clearly defined?	/01/	DR	In Section B.3. of the PDD, the fuel production and collection area has been defined as the woodlands and forests within the territorial boundaries of Kenya. This is according to the applied methodology which defines the fuel production and collection area as the area within which the woody biomass, in cases where woody biomass is the baseline fuel, can reasonably be expected to be produced, collected and supplied.	OK	OK
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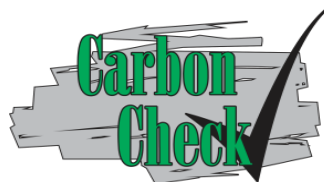
<p>B.2.2. Are all emission sources and gasses related to the baseline scenario, project scenario and leakage clearly identified and described in a complete manner?</p>	/01/	DR	<p>The methodology prescribes that emissions from fuels can occur during fuel production, transport and consumption.</p> <p>The major source for GHG emissions is the burning of fuel as the existing kitchen practice of boiling water as a treatment for consumption. However the types of emissions depend on the types of fuels used. Hence depending on the closure of CL 6 in section B.1.3. above.</p> <p>Refer CL 6 in section B.1.3. above.</p> <p>As stated in Section B.3. of the PDD, the fuel wood consumed in the baseline scenario is collected from woodlands neighbouring the targeted communities, hence emissions from fuel production and transportation are not included in the emissions calculations. However this is not being demonstrated in the table 1 in the same Section. Hence a CAR has been raised.</p> <p>CAR 8: The project participant is requested to update Table 1 in Section B.3 of the PDD to show that GHG emissions, attributable to production and transportation of the fuel wood are not included in the emission reductions calculations.</p>	<p>Refer CL 6 CAR 8</p>	OK
<p>B.3. Identification of the Baseline Scenario</p>					



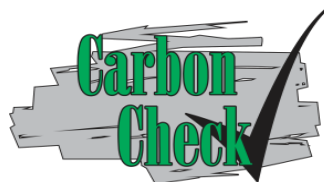
<p>B.3.1. Which baseline scenario(s) has/have been identified? Is the list of identified baseline scenario(s) complete?</p>	<p>/01/</p>	<p>DR, I</p>	<p>The following three baseline scenarios have been identified: 1) boiling water; 2) the use of chlorine; and 3) no treatment. This list is complete.</p>	<p>OK</p>	<p>OK</p>
<p>B.3.2. How have other baseline scenarios been eliminated in order to determine the baseline?</p>	<p>/01/</p>	<p>DR</p>	<p>As described in Section B.4. of the PDD, a Baseline Survey has been conducted, the outcome has eliminated 2 of the 3 alternatives.</p> <p>However the Baseline Survey report, as referred to in Section B.4. of the PDD has not been made available for validation. Hence a CAR has been raised.</p> <p>CAR 9: The Baseline Survey report of the paired sample approach to determine the baseline target population characteristics, as referred to in the PDD, Section B.4., has not been submitted to DOE for validation.</p>	<p>CAR 9</p>	<p>OK</p>



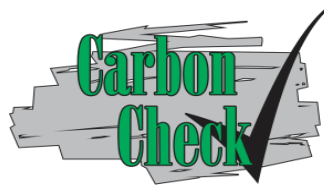
<p>B.3.3. Does the PDD follow the steps to determine the baseline scenario required by the methodology and is the application of the methodology and the discussion and determination of the chosen baseline transparent and have conservative assumptions been used?</p>	/01/	DR, I	<p>Based on the Baseline Survey as referred to in Section B.4. of the PDD, only 83% of the families that were surveyed boiled water in the baseline. Moreover only 51% boiled water daily. The DOE conducted a sample in order to evaluate and verify the findings of the Baseline Survey and it has been confirmed that respondents do not boil water on a daily basis. It has not been demonstrated clearly how determination of the baseline scenario takes these figures into account to ensure 100% displacement of the baseline technology. Hence a CL has been raised.</p> <p>CL 7: The project participant is requested to demonstrate how determination of the baseline ensures 100% displacement of the baseline technology.</p>	CL7	OK
<p>B.3.4. Has the baseline scenario been determined taking into account relevant national and/or sectoral policies, macro-economic trends and political aspirations? I.e., would the project activity have been implemented anyway, in spite of current and known future legally binding regulatory instruments?</p>	/01/	DR, I	<p>National and/or sectoral, macro-economic trends and political aspirations have been taken into account while evaluating the NRB.</p>	OK	OK
B.4. Additionality					



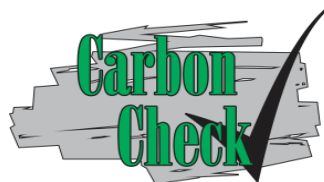
B.4.1. Has the correct tool for the demonstration of additionality been selected and applied?	/01/	DR	<p>The correct tool as per the applied methodology has been applied: As stated in Section B.5. of the PDD, the UNFCCC methodological tool “Tool for the Demonstration and Assessment of Additionality” (Version 5.2).</p> <p>However the demonstration of the additionality of the project activity is not convincing nor conclusive. Hence a CL has been raised.</p> <p>CL 8: The project participant is requested to demonstrate additionality of the project activity in a convincing and conclusive manner.</p>	CL 8	OK
B.4.2. Is the discussion on additionality consistent with the identification of all potential realistic and credible baseline scenarios?	/01/	DR	Depending on closure of CL 8 in section B.4.1. above.	Refer CL 8	OK
B.4.3. Have alternatives to the project activity been identified and do these identified alternatives include technologies and practices that include outputs (e.g.) cement or services comparable with the proposed CDM project activity?	/01/	DR	Depending on closure of CL 8 in section B.4.1. above.	Refer CL 8	OK
B.4.4. Which arguments have been identified to demonstrate that the project activity is additional?	/01/	DR	Depending on closure of CL 8 in section B.4.1. above.	Refer CL 8	OK
B.4.5. If an investment analysis has been used, has it been shown that the proposed project activity is economically or financially less attractive than at least one other alternative, without the revenue from the sale of VERs?	/01/	DR	Depending on closure of CL 8 in section B.4.1. above.	Refer CL 8	OK



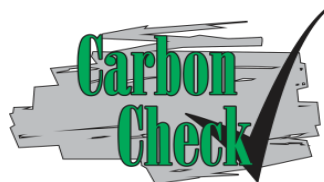
B.4.6. If a barrier analysis has been used, has it been shown that the proposed project activity faces barriers that prevent the implementation of this type of proposed project activity but would not have prevented the implementation of at least one of the alternatives?	/01/	DR	Depending on closure of CL 8 in section B.4.1. above.	Refer CL 8	OK
B.4.7. How has the correctness of these additionality arguments been assessed?			Depending on closure of CL 8 in section B.4.1. above.	Refer CL 8	OK
B.4.8. What is normal practice in the region? I.e., have similar projects been already implemented in the target area?			Depending on closure of CL 8 in section B.4.1. above.	Refer CL 8	OK
B.4.9. Have conservative assumptions been used for the demonstration of additionality?			Depending on closure of CL 8 in section B.4.1. above.	Refer CL 8	OK
B.4.10. Have relevant national law and regulations been taken into account when demonstrating additionality?			Depending on closure of CL 8 in section B.4.1. above.	Refer CL 8	OK
B.4.11. Is it demonstrated/justified that the project activity itself is not a likely baseline scenario?			Depending on closure of CL 8 in section B.4.1. above.	Refer CL 8	OK
B.5. Application of the Baseline Methodology					
B.5.1. Has the correct version of the applied methodology been used, i.e. the latest version at the time of first submission?	/01/	DR	Refer section B.1.1. above.	OK	OK
B.5.2. Has the approved methodology been applied correctly for determining baseline emissions?	/01/ /10/	DR	Yes, the methodology has been approved and baseline emissions have been estimated in accordance to Annex 3 to the applied methodology, which describes the application of the methodology to water treatment activities.	OK	OK



<p>B.5.3. Has the approved methodology been applied correctly for determining project emissions?</p>	<p>/01/</p>	<p>DR</p>	<p>As stated in Section B.4. of the PDD, regarding the SAM-filter, the project boundary is the local communities within which a SAM-filter is installed and treated water is consumed.</p> <p>However, it has not been demonstrated how project emissions related to the SAM-filters (e.g. fuel consumption attributable to transport within the project boundary and to potential auxiliary equipment for pressurising water through the membranes, etc.) have been taken into consideration when applying the methodology. Hence a CL has been raised.</p> <p>CL 9: It has not been demonstrated how project emissions attributable to the introduction of the SAM-filters have been taken into account during application of the methodology.</p>	<p>CL-9</p>	<p>OK</p>
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<p>B.5.4. Has the approved methodology been applied correctly for determining leakage?</p>	<p>/01/</p>	<p>DR, I</p>	<p>The applied methodology prescribes six possible parameters that should be evaluated for leakage-emissions. Each of the possible parameters has been discussed in the PDD demonstrating that leakage emissions are not applicable to the project activity.</p> <p>However the project participant is requested to elaborate on some of the discussed parameters, hence CLs have been raised.</p> <p>CL 10: Discussion of parameter c), as per the applied methodology as a possible source of leakage emissions, is not consistent with the description of the project activity in Section A.2. of the PDD; Section A.2 states to envisage the project activity to result in an introduction of 16,976 BSF filters, whereas in the discussion of possible sources of leakage emissions (Section B.6.3. on Leakage) it is mentioned to envisage the introduction of 25,000 BSF filters during the first crediting period. Project participant is requested to clarify these figures.</p> <p>The discussion of parameters a) and d) have not been sufficiently substantiated. The project participant is requested to elaborate on these discussions.</p>	<p>CL 10 CL 11</p>	<p>OK</p>
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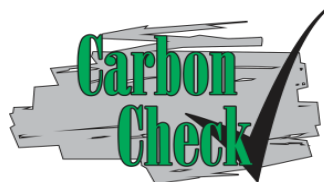
B.5.5. Where applicable, has the approved methodology been applied correctly for the direct calculation of emission reductions?	/01/	DR	The ex-ante calculations of emission reductions have been described in Section B.6.3. of the PDD and are as per the applied methodology and its Annex 3.	OK	OK
B.5.6. Have all the methodological choices been explained, have they been properly justified and are they correct?	/01/	DR	Depending on closure of CL 9 in section B.5.3. above.	Refer-CL-9	OK
B.5.7. Are uncertainties in the GHG emissions estimates properly addressed in the documentation?	/01/	DR	All data for the ex-ante calculations of emission reductions have been backed by verifiable data-sources such as: guidance through applied GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption”, IPCC default values, literature and default values provided by UNFCCC’s Working Group, guidance through approved EB methodology AMS-II.G., the FAO, the ODI, the ISPRS, studies by Kenya Forest Service of the Ministry of Environment and Natural Resources, FOSA (Forest Outlook Studies in Africa) and The Forestry Training Institute of Tanzania and the University of Agriculture and Technology in Kenya, the UNEP, the World Rainforest Movement, the African Economic Outlook, the African Crop Science Society, Pisces, the Global Environment Facility. Uncertainties have been addressed by the use of correction-methods as per the applied GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption”.	OK	OK
B.6. Ex-ante data and parameters used					



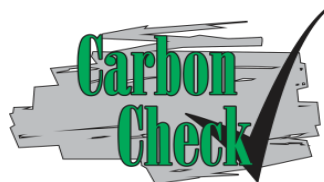
B.6.1. Are the data provided in compliance with the methodology?	/01/	DR	Data as input for the ex-ante calculations of emission reductions have been obtained from verifiable sources as indicated in section B.5.7. above and through guidance laid down by the methodology, i.e. NRB assessment, project-surveys of end-user characteristics, baseline water boiling test and water consumption field test.	OK	OK
B.6.2. Is all the data derived from official data sources or replicable records and have these been correctly quoted?	/01/	DR	Refer section B.5.7. above	OK	OK



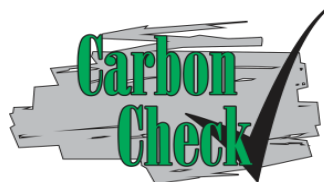
B.6.3. Is the vintage of the baseline data correct?	/01/	DR	<p>As per the applied methodology, the ex-ante baseline emissions are back-calculated from the project scenario. Hence the vintage of the baseline data depend on the outcomes of NRB assessment, project surveys and baseline water boiling test. Apart from the referral to the Baseline Survey to determine the baseline target population characteristics in Section B.4. of the PDD, it has not been described in the PDD that project surveys have been carried out in order to gather the relevant data allowing for estimation of baseline emissions. Hence a CL has been raised.</p> <p>CL 11: The project participant is requested to submit supporting evidence that project surveys took place in order to determine end user characteristics (e.g. quantity of water consumed etc.).</p>	CL 11	OK
B.7. Calculation of Emission Reductions					
B.7.1. Has the approved methodology been applied correctly for determining emission reductions?	/03/	DR	Refer section B.5. and B.6. above, hence depending on closure of CL 9, 10 and 11.	Refer CL 9, 10 and 11	OK
B.7.2. Are the emission reduction calculations documented in a complete and transparent manner?	/03/	DR	Refer section B.5. and B.6. above, hence depending on closure of CL 9, 10 and 11.	Refer CL 9, 10 and 11	OK
B.7.3. Have conservative assumptions been used to calculate emission reductions?	/03/	DR	Refer section B.5. and B.6. above, hence depending on closure of CL 9, 10 and 11.	Refer CL 9, 10 and 11	OK



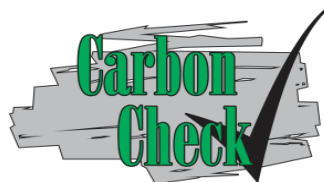
B.7.4. Is the projection based on provable input parameter?	/01/ /10/	DR	<p>It has not been clearly demonstrated that data used as input parameters for the ex-ante calculation of emission reductions has been gathered whilst taking into account political and demographic trends i.e., are future trends expected to lead to an increase in GHG emissions and if so, has the most conservative value been used for the input-parameters? A CL has been raised to clarify.</p> <p>CL 12: The project participant is requested to clearly indicate that the most conservative values have been used as input parameters for the calculation of emission reductions, taking into account future trends that may affect the GHG balance.</p>	CL 12	OK
B.8. Emission reductions					
B.8.1. Will the project result in fewer GHG emissions than the baseline scenario?	/01/	DR	<p>The project activity introduces 'zero emission technology' to treat water for consumption, thus displacing emissions-intensive burning of firewood for boiling water as a means to treat water in the baseline, hence the project activity results in fewer GHG emissions compared to the baseline scenario.</p>	OK	OK



<p>B.8.2. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?</p>	/01/	DR	<p>The tables as presented in Sections A.4.4. and B.6.4. of the PDD are not consistent regarding the first year of the crediting period. Hence a CL has been raised.</p> <p>CL 13: The project participant is requested to clearly indicate the start of the crediting period in relation to estimated emission reductions in the first year and to make tables in Sections A.4.4. and B.6.4. of the PDD consistent in relation to the latter.</p>	CL 13	OK
B.9. Monitoring Period					
<p>B.9.1. Does the monitoring methodology provide a consistent approach in the context of all parameters to be monitored and further information provided by the PDD? Are all parameters and data that is available at validation consistent with the approved Methodology?</p>	/01/	DR	<p>The parameters available at validation are “the portion of users of water treated by the introduced technology in the project scenario, that were already using safe water in the baseline scenario but were not boiling the water as a treatment practice” which is been determined through a baseline survey and “the quantity of wood fuel or fossil fuel used to treat 1 litre of water by boiling the water through burning the wood fuel” which has been determined through the Baseline Water Boiling Test and is the same for the project and the baseline scenario. This is as per the applied methodology.</p> <p>Furthermore, the parameters to be monitored are presented in Section B.7.1. of the PDD and are consistent with the applied methodology.</p>	OK	OK
B.10. Data and Parameters Monitored					



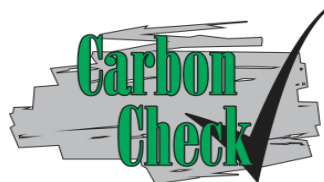
<p>B.10.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the emission reductions within the project boundary during the crediting period?</p>	/01/	DR	<p>As presented in Section B.7.1. of the PDD, all parameters required to be monitored over the crediting period for Water Treatment Project Scenarios as per the applied methodology are included in the monitoring plan. However, since two different project technologies are introduced, the quality of treated water by a SAM Filter is not included as a parameter in the overview in Section B.7.1. of the PDD, hence a CL has been raised.</p> <p>CL 14: The project participant is requested to include as a parameter the project water quality of water treated by SAM Filter technology.</p>	CL 14	OK
<p>B.10.2. Do the means of monitoring described in the plan comply with the requirements of the methodology?</p>	/01/	DR	<p>As prescribed by the applied methodology, the monitoring plan comprises a total sales record and a project database, which will be maintained continuously and stored on an electric database, a monitoring survey and a usage survey will be conducted annually and a leakage assessment is conducted every two years.</p>	OK	OK
<p>B.10.3. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the approved methodology applied?</p>	/01/	DR, I	<p>The project participants have selected a fixed baseline, assuming conditions for the project activity to be unchanging.</p> <p>The project participant chooses not to update the NRB assessment based on the fixed baseline and the fact that the project scale is not large enough to affect the national NRB fraction as demonstrated in Section B.6.3. of the PDD to be 92%</p> <p>As per the applied methodology, all supporting documentation and records for the project will be easily accessible for spot checking and cross checking by Viability Africa, LLC a third party to the project activity.</p>	OK	OK



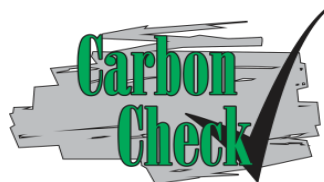
B.11. Quality Control and Quality Assurance Procedures					
B.11.1. Is the selection of data undergoing quality control and quality assurance procedures complete?	/01/	DR	<p>The project participant has described that an accurate quality control and assurance procedure is in place. However it has not been described in a transparent manner what these procedures entail and a clear overview of the parameters which are subject to these quality control and assurance procedures has not been included. Hence a CL has been raised.</p> <p>CL 15: The project participant is requested to describe in a transparent manner what the QC/QA-procedures entail and which parameters are subject to these procedures. The project participant is requested to submit these procedures to the DOE for validation.</p>	CL 15	OK
B.11.2. Is the belonging determination of uncertainty levels done correctly for each ID in a correct and reliable manner?			Refer B.11.1. Hence depending on closure of CL 15 in section B.11.1 above.	Refer CL 15	OK
B.11.3. Are quality control procedures and quality assurance procedures sufficiently described to ensure the delivery of high quality data?			Refer B.11.1. Hence depending on closure of CL 15 in section B.11.1 above.	Refer CL 15	OK
B.11.4. Is it ensured that data will be bound to national or internal reference standards?			Refer B.11.1. Hence depending on closure of CL 15 in section B.11.1 above.	Refer CL 15	OK
B.11.5. Is it ensured that data provisions will be free of potential conflicts of interests resulting in a tendency of overestimating emission			Refer B.11.1. Hence depending on closure of CL 15 in section B.11.1 above.	Refer CL 15	OK
B.12. Operational and Management Structure					



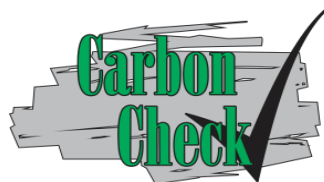
B.12.1. Is the authority and responsibility of project management clearly described?	/01/	DR	Authority and responsibility of project management have not been clearly described, nor have procedures been identified for training of monitoring personnel. Hence a CL has been raised. CL 16: The project participant is requested to describe in a clear manner, the roles and responsibilities regarding the monitoring and project management, including procedures on training of monitoring personnel.	CL 16	OK
B.12.2. Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	/01/	DR	Depending on closure of CL 16 in section B.12.1. above.	Refer CL 16	OK
B.12.3. Are procedures identified for training of monitoring personnel?	/01/	DR	Depending on closure of CL 16 in section B.12.1. above.	Refer CL 16	OK
B.13. Baseline Details					
B.13.1. Is there any indication of completion of the baseline study?	/01/	DR	As stated in Section B.8. of the PDD, the date of completion of the baseline study and monitoring plan was 11/01/2011.	OK	OK
B.13.2. Is this in consistency with the time line of the PDD history?	/01/	DR	The validated PDD was version 01 as of 11/01/2011. However depending on closure of CL 2 in section A.1.2. above.	Refer CL 2	OK
B.13.3. Is all data required provided in a complete manner by annex 3 of the PDD?	/01/	DR	Annex 3 of the PDD is limited to the description of the Baseline Water Boiling Test as required by Annex 3 of the applied methodology. Section B.4. of the PDD describes how the baseline scenario has been identified.	OK	OK
C - Duration of the Project / Crediting Period					
C.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	/01/	DR	The starting date of the project activity is 26/06/2009 and the operational lifetime is 10 years.	OK	OK



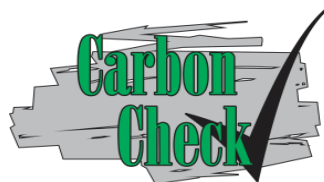
C.2. Is the assumed crediting time clearly defined and reasonable?	/01/	DR	The project participant has chosen a fixed crediting period of 10 years.	OK	OK
C.3. Does the project's operational lifetime exceed the crediting period	/01/	DR	As stated in Sections C.1.2. and C.2.1.2. the expected operational lifetime of the project activity equals the length of the first crediting period of 10 years.	OK	OK
D - Environmental and Social Impact Assessment					
D.1. Does the project conform to host country (local, regional or national) requirements concerning environmental and social impact assessment?	/01/	DR	The Environmental Management and Co-ordination Act 1999, No8 of 1999 does not stipulate mandatory requirements for the proposed water filtration technologies.	OK	OK
D.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	/01/	DR	Refer section D.1. above.	OK	OK
D.3. Has an analysis of the environmental impacts of the project activity been sufficiently described?	/01/	DR	Refer section D.1. above.	N/A	OK
D.4. Will the project create any adverse environmental and/or social effects?	/01/	DR	Refer section D.1. above.	N/A	OK
D.5. Are transboundary environmental and/or social impacts considered in the analysis?	/01/	DR	Refer section D.1. above.	N/A	OK
D.6. Have identified environmental and/or social impacts been addressed in the project design?	/01/	DR	Refer section D.1. above.	N/A	OK
E – Sustainable Development					
E.1. Has a "Do no Harm" assessment been carried out?	/05/ /10/	DR	Both the final Passport and LSC Report contain a 'Do no Harm' assessment table, based on the eleven safeguarding principles as per GS guidelines.	OK	OK
E.1.1. Has the DNH assessment been based on accurate information and have reference sources been included?	/05/ /10/	DR	Refer section E.1. above.	OK	OK



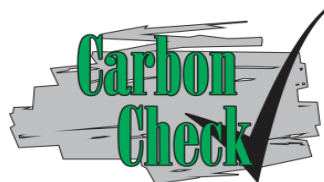
E.2. Has a "Detailed Impact Assessment" been carried			Refer sections E.2.1. – E.2.7. below.	OK	OK
E.2.1. Has a sustainable development matrix been established as per the GS guidelines?	/05/ /10/	DR	Both the final Passport and the LSC Report contain a Sustainable Development Matrix, each containing the twelve specific indicators as per Annex I to the GS Rules & Toolkit.	OK	OK
E.2.2. Are the SD indicators properly identified as per guidance outlined by The Gold Standard?	/05/ /10/	DR	Refer section E.2.1. above	OK	OK
E.2.3. Have data been collected in order to monitor the project's performance on the sustainable development indicators? Are crucial indicators included in the monitoring plan?	/05/ /10/	DR	<p>The outcome of scoring the project activity against the twelve SD indicators is that none of the indicators have scored negative; hence no mitigation measures have been included in the SD matrix and thus need not be included in the monitoring plan. However only 4 out of 10 positively scored SD indicators have been included in the Sustainability Monitoring Plan as described in Section G. of the Passport, whereas the GS Toolkit prescribes that all non-neutral indicators must be monitored. Hence a CAR has been raised.</p> <p>CAR 10: Not all of the non-neutral indicators have been included in the Sustainability Monitoring Plan as per GS Rules & Toolkit.</p>	CAR 10	OK
E.2.4. Has the project activity been scored against the twelve specific Sustainable Development indicators?	/05/ /10/	DR	Refer section E.2.3. above.	OK	OK
E.2.5. Has the scoring been done in a transparent manner, i.e. is the scoring reproducible and verifiable?	/05/ /10/	DR	Yes, as the SD indicators have been connected to the UNDP Millennium Development Goals.	OK	OK



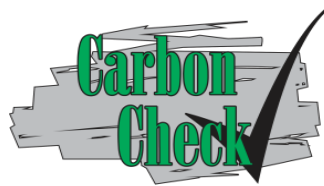
E.2.6. Are at least two of the three categories (i.e. environment, social and technology and economy) positive and is the third sub-total at least neutral?	/05/ /10/	DR	Refer section E.2.3. above.	OK	OK
E.2.7. Have SD indicators been discussed during the stakeholder consultations?	/05/ /10/	DR	As presented in the Agenda of the Stakeholder Consultation Meeting on the 7th of May 2011, Section B.1. of the Local Stakeholder Consultation Report, topic 6 was the discussion on Sustainable development, including DNH assessment and SD Matrix of which the results have been presented in a 'Stakeholders Blind SD matrix' as provided in Section D.2. of the LSC Report.	OK	OK
F – Local Stakeholder Consultation					
F.1. If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/law?	/01/ /05/ /10/	DR	Refer section D.1. above.	OK	OK
F.2. Have the GS requirements regarding stakeholder consultation been fulfilled.	/01/ /05/ /10/	DR	Yes, the GS requirements have been fulfilled.	OK	OK
F.2.1. Has an invitation tracking table been filled out?	/01/ /05/ /10/	DR	As presented in the LSC Report, an invitation tracking table, including local people impacted by the project or official representatives, local policy makers and representatives of local authorities, local and international NGOs and local Gold Standard experts.	OK	OK



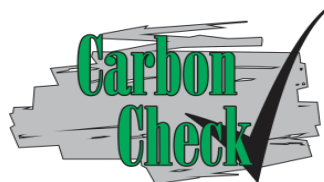
F.2.2. Have copies of invitation and/or advertisements been made available for validation?	/01/ /05/ /10/	DR	Email invitation were mainly used for invitations of NGOs, local people have been invited by word of mouth and by passing the message through the schoolchildren. Moreover public advertisements (both in English as in the local language Swahili) have been placed on strategic locations in the village. A copy of the text for the email and the public advertisements has been included in the LSC Report and it has been confirmed that the texts contain a non-technical description of the project activity.	OK	OK
F.2.3. Have appropriate media been used to invite comments by local stakeholders?	/01/ /05/ /10/	DR	Refer section F.2.2. above.	OK	OK
F.2.4. Has a non-technical summary in the local language been included in the LSC Report as well as a summary in English?	/01/ /05/ /10/	DR	Refer section F.2.2. above.	OK	OK
F.2.5. Has a participants list been made available?	/01/ /05/ /10/	DR	Section C. of the LSC Report contains a list of participants.	OK	OK
F.2.6. Have relevant stakeholders been consulted?	/01/ /05/ /10/	DR	Refer section F.2.1. above.	OK	OK



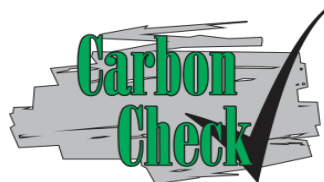
F.2.7. Have/has the stakeholder evaluation form(s) been made available?	/01/ /05/ /10/	DR	Yes, as presented in the LSC Report, the evaluation form has been made available, both a blank version as well as participant evaluation forms, completed by the participants.	OK	OK
F.2.8. Have minutes of the meeting(s) been made available?	/01/ /05/ /10/	DR	Yes, as presented in Section C.3. of the LSC Report, the minutes of the meetings have been made available.	OK	OK
F.2.9. Is a summary of the stakeholder comments received provided?	/01/ /05/ /10/	DR	The LSC Report presents in Section C.3.iii a table containing all the comments that have been received.	OK	OK
F.2.10. Has it been demonstrated that due account has been taken on comments received? And in which way has due account been taken?	/01/ /05/ /10/	DR	The table in Section C.3.iii of the LSC Report indicates which comments have been taken into account. It also explains why several comments have not been taken into account, reason being that these comments would require technological changes which are deemed not feasible. Hence those comments have not been taken into account. Comments were taken into account by providing further explanation as comments consisted of requests for clarification. No design change has occurred as a result.	OK	OK
F.2.11. Did the stakeholders require a revisit of the sustainable development assessment? And if so, has this been done?	/01/ /05/ /10/	DR	No negative comments have been received, hence no need for a revisit of the sustainability assessment.	OK	OK



F.2.12. Has a consolidated sustainable development matrix been presented on both a preliminary scoring by the project participant and the outcome of the blind exercise?	/01/ /05/ /10/	DR	Section D.1.ii of the LSC Report presents the preliminary Sustainable Development matrix, Section D.2. of the LSC Report presents the Stakeholders Blind SD matrix and Section D.3. of the LSC Report presents the consolidated SD matrix.	OK	OK
F.2.13. Have comments, received by email or other media, been considered?	/01/ /05/ /10/	DR	<p>It has not been described in the LSC Report that comments, received by email or other media, have been considered. Hence a CL has been raised.</p> <p>CL 17: The project participant is requested to clarify whether or not comments have received via email or other media and if so whether they have been taken into account and in which manner.</p>	CL 17	OK
G – Stakeholder Feedback Round					



<p>G.1. Has the latest version of the complete PDD (including EIA if applicable) been made publicly available in a readily accessible form for a period of two months prior to completion of the validation?</p>	<p>/05/ /10/</p>	<p>DR</p>	<p>As per the Passport, Section E.2., the Stakeholder Feedback Round has not been taken place as of compilation of the current version of this DVR. However it is stated in the Passport that only the LSC Report will be made publicly available, which is not according to the requirements prescribing that it are the LSC Report, the (revised) Passport, the (revised) PDD and relevant supporting documents such as an EIA if applicable must be made publicly available for a duration of at least two months before finalisation of the validation process of the project activity. Hence a CAR has been raised.</p> <p>CAR 11: The project participant is requested to make provisions for making publicly available the LSC Report, the (revised) Passport, the (revised) PDD and relevant supporting documents such as an EIA if applicable for a period of at least two months before finalisation of the validation process of the project activity as per GS requirements.</p>	<p>CAR 11</p>	<p>OK</p>
<p>G.2. Has a non-technical summary of the project (in appropriate language(s) and in English) been made publicly available in readily accessible form for a period of two months prior to completion of the validation?</p>	<p>/05/ /10/</p>	<p>DR</p>	<p>Refer section G.1. above; hence depending on closure of CAR 11.</p>	<p>Refer CAR 11</p>	<p>OK</p>
<p>G.3. Have all relevant supporting information (if available in appropriate local language(s); including in the case of an ESIA, at least a one-page English summary) been made publicly available in a readily accessible format for a period of at least two months prior to completion of the validation?</p>	<p>/05/ /10/</p>	<p>DR</p>	<p>Refer section G.1. above; hence depending on closure of CAR 11.</p>	<p>Refer CAR 11</p>	<p>OK</p>



G.4. Has additional, non-translated information been made publicly available in a readily accessible format for a period of at least two months prior to completion of the validation? And translated into the local language upon request from a stakeholder?			Refer section G.1. above; hence depending on closure of CAR 11.	Refer CAR 11	OK
G.5. Does the Passport contain information on the stakeholder feedback round, including:			Refer section G.1. above; hence depending on closure of CAR 11.	Refer CAR 11	OK
G.5.1. description of the procedure followed to invite comments			Refer section G.1. above; hence depending on closure of CAR 11.	Refer CAR 11	OK
G.5.2. all the details of the oral hearing such as place, date, participants, language, local or national Gold Standard supporters, etc.			Refer section G.1. above; hence depending on closure of CAR 11.	Refer CAR 11	OK
G.5.3. all written and/or oral comments received			Refer section G.1. above; hence depending on closure of CAR 11.	Refer CAR 11	OK
G.5.4. arguments on whether comments are taken into account or not and the respective changes to the project design			Refer section G.1. above; hence depending on closure of CAR 11.	Refer CAR 11	OK

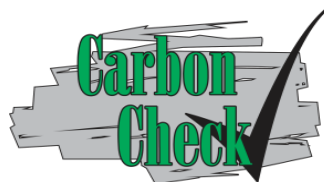
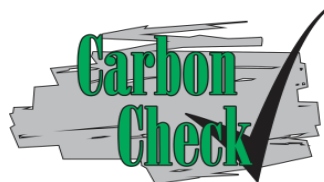


Table-2: List of findings (compliance of § 148 b of VVS)

Finding	1		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The table in Section A.4.4. of the PDD does not indicate that the principle of conservativeness has been applied when establishing the estimation of average CO2 emission reductions over the crediting period.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Section A.4.4 of the PDD has been amended pursuant to CAR 1. The applicability of the GS principle of conservativeness has been demonstrated and the values in the ex- ante estimation of the emissions reductions has been stated in absolute values.		
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Section A.4.4 of the revised PDD is found revised in order to include the GS principle of conservativeness, moreover link provided as footnote 13 as a supporting reference for toolkit version 2.1 is accessible and acceptable. CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed		

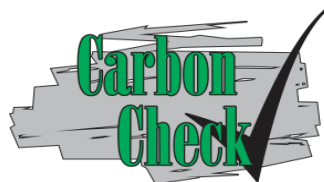
Finding	2		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR



Finding	2
Description of finding <i>(Validators)</i>	A Financing Plan or other evidence has not been submitted for validation thus not enabling DOE to assess compliance with the requirement that diversion of ODA is not applicable.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Kenya is listed amongst nations which are part of the OECD Development Assistance Committee's ODA recipient list ⁴ . In accordance with provisions of the GS toolkit Version 2.1 therefore an ODA declaration has been written to the GS and submitted to the DOE by the PP. The ODA declaration is developed in accordance with the provisions of Gold Standard Toolkit Annex D.
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	The web-link provided in the footnote 1 for the corrective action taken by PP above is not accessible. Also, the web-link provided in the footnote 2, do not show the section 1.2.5 in the document. Moreover, the ODA declaration submitted to the DOE is not found correct as the latest version of the ODA declaration i.e. Annex D, version 2.1 has not been used. Also, make it clear whether PP is using version 2.1 or version 2.2, consistency is required to be maintained. CAR 2 is open
Corrective Action #2	A soft copy of the document has been provided to the DOE rather than a weblink reference. The ODA declaration and indeed the entire project is under Version 2.1 of the toolkit and all mention Version 2.2 has been removed from all design documentation as an error.
DOE Assessment #2	The PP has provided the document in soft copy and the web link provided in footnote 1 is accessible and PP has provided the ODA declaration and also corrected the version 2.1 in entire documents. Hence, CAR 2 is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

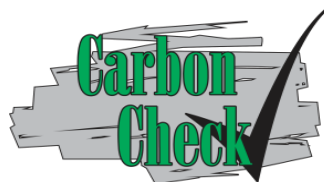
Finding	3		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Preventing of double counting in case of the SAM-filter has not been clearly described and therefore condition 1 of the applied methodology has not been met.		

⁴DAC List of ODA Recipients. Effective for reporting on 2012 and 2013 flows.



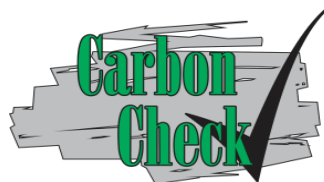
Finding	3
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Section B.2 of the PDD has been amended to describe how double counting has been prevented for the SAM units.
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Under eligibility condition no. 2 in section B.2 of the revised PDD, PP declares that SAM filter membranes have not been included in any other voluntary project activity; hence no double counting of ERs will take place. However a declaration on the letterhead of the company for no double counting is not submitted by the client. CAR 3 is open.
Corrective Action #2	A signed letter of attestation on the ACF letterhead has been furnished to the DOE.
DOE Assessment #2	In the proposed project activity, two types of filters i.e. BSF and SAM both are included, however the declaration letter dated 13/01/2013 for no double counting mentions only about SAM filter. PP is required to submit the letter of declaration for both the technology being included in the proposed project activity. CAR 3 is open
Corrective Action #3	A letter of attestation for the BSF units has been provided to the DOE.
DOE Assessment #3	PP has submitted the declaration letter for BSF filter dated 14/04/2013, for no double counting. Hence, CAR 3 is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	4
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Condition 2 of the applied methodology has not been addressed in the PDD.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Section B.2 of the PDD has been amended to describe the project activities correspondence to the eligibility criteria.



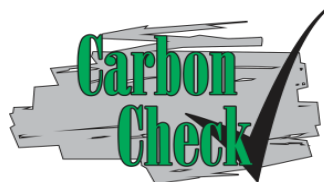
Finding	4
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Condition 2 of the applied GS methodology “Technologies and Practices to Displace Decentralized Thermal Energy Consumption” has been found incorporated correctly, also a log sheet with the unique identification no. of all the filters. Unique identification no. of filters were cross checked during the site visit and found correct and acceptable to the validation team. CAR 4 is successfully closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	5		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Condition 3 of the applied methodology has not been addressed in the PDD.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Section B.2 of the PDD has been amended to describe the project activities correspondence to the eligibility criteria.		
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Condition 3 of the applied GS methodology is found mentioned under section B.2 of the revised PDD, however, source of formula for calculating thermal output is not provided. CAR 5 is open.		
Corrective Action #2	Section B.2 of the PDD has been amended pursuant to the CAR. The formula used has been modified from the Gold Standard methodology Thermal energy from plant oil for the user of cooking stoves. The modifications made have been explained in a series of steps in the PDD.		

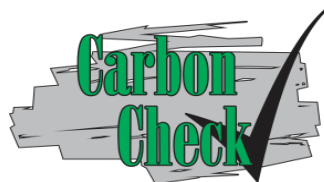


Finding	5
DOE Assessment #2	<p>Formula showing the thermal output for the baseline traditional stoves has been derived from the GS methodology “Thermal energy from plant oil for the user of cooking stoves”. In this methodology the formula is specifying the calculation of thermal energy based on the vegetable oil used within the stoves, however in the case of proposed project activity the baseline scenario mentions about using the fuel wood traditional stoves. Hence, PP has suitably substituted the formula and has shown the calculation for fuel wood based stoves. It is acceptable to the validation team.</p> <p>However, PP is required to submit the clarification provided by the GS technical Advisory Committee regarding the confirmation that this eligibility criteria applies to a singular baseline technology to the Validation Team.</p> <p>CAR is Open</p>
Corrective Action #3	The PP has submitted the original clarification request as well as the response from the Gold Standard. The GS approved the approach via email of which a screenshot has been submitted to the DOE as well as the original email response from the GS.
DOE Assessment #3	PP has submitted the letter and email for clarification request dated 15/07/2012 and response from the GS technical Advisory Committee regarding the confirmation that this eligibility criteria applies to a singular baseline technology.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

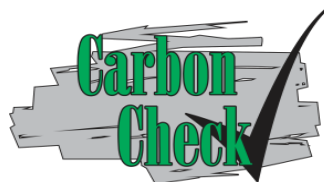
Finding	6		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Condition 4 of the applied methodology has not been addressed in the PDD.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Section B.2 of the PDD has been amended to describe the project activities correspondence to the eligibility criteria.		



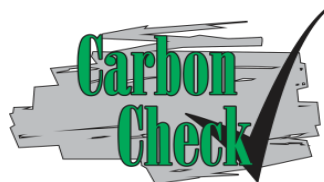
Finding	6
<p>DOE Assessment #1 (validators) <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>Condition 4 of the applied GS methodology is found mentioned under section B.2 of the revised PDD, however signed proof from filter owners for transfer of carbon credits are not submitted by PP.</p> <p>CAR is open.</p>
<p>Corrective Action #2</p>	<p>Proof of Transfer has been provided to the DOE.</p>
<p>DOE Assessment #2</p>	<p>PP has provided the draft copies of the proofs. PP is required to provide the signed final sample copies of the same.</p> <p>CAR is open.</p>
<p>Corrective Action #3</p>	<p>Aqua Clara has informed all end-users that it will claim all carbon credits for the project activity. For filters installed prior to the 20th of September 2011, the PP will solicit VER transfer forms signed by elected county representatives and for BSF filters installed after that date each end-user will sign VER transfer forms. At the point of purchase of water for the SAM units, at the first instance of purchase, the end-user will sign a VER transfer form. A few signed end-user transfer agreement have been provided as supporting documents.</p>
<p>DOE Assessment #3</p>	<p>PP shall explain clearly whether county representative is the technology end user? In order to meet the applicability criteria of the methodology PP shall provide contract or written assertions from the technology end user regarding waiver of their emission reduction claims / rights.</p> <p>CAR is open.</p>
<p>Corrective Action #4</p>	<p>County Representatives are not end users. Eligibility criteria number 4 of the Gold Standard methodology requires the PP to communicate to all project participants of all the PP claiming the VERs from the project activity. The methodology does not expressly state that the communication in writing needs to be a direct contract between the PP and the end user. The word used in the methodology is that the end users need to be notified. The PP has elected therefore to use country representatives to sign off agreements that explain that the VERs have been transferred to the PP as a transparent means of evidencing that the end users have been notified of this fact. County Representatives are elected representatives of the community members which objectively ensures that the procedure elected by the PP is transparent. The PP holds regular meetings with the community at which the VER transfer shall be repeated and made known to the public as a reminder. This shall be recorded and made available to the DOE in the project stage. Again, the PP insists that this approach is only applicable to end users who received filters prior to September 2011. End users who receive filters after this date shall sign off individual VER transfer sheet effectively transferring VERs from the end users to the PP.</p>



Finding	6
<p>DOE Assessment #4</p>	<p>The PP states that county representatives are elected members of the community and they have been used to sign off agreements, which explain that, the VERs have been transferred to the PP.</p> <p>However it is still not clear that how the county representatives informed the individual equipment owners/users i.e., end users to the waiving of their carbon rights in exchange for pricing of the improved technology which discounts its true cost.</p> <p>CAR is open.</p>
<p>Corrective Action #5</p>	<p>The PP has expanded non-direct communication (i.e agreements between the PP and end users) from county representatives to include village elders and chiefs who represent administrative leadership at the lowest administrative units i.e. villages.</p> <p>The PP shall enter agreements with these officials and have the signed agreements placed at market centres to ensure that the end users are aware that the VER revenue has been transferred to the PP. Sample letter have been provided to the DOE and signed copies of the letters will be provided prior to the first verification.</p>

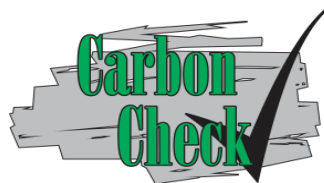


Finding	6
<p>DOE Assessment #5</p>	<p>1. Sample copy of “Carbon Credit Waiver Document” between county representative and Aqua Clara Foundation has been provided by the PP. The sample copy under the title “Transfer of Carbon Credit Ownership states:</p> <p>“By signing this form / voluntarily accept to transfer all the rights to the Voluntary Emission Reductions (VERs) generated from the use of the Aqua Clara Bio Sand filters in <i>my Ward</i>. I also confirm that the concept of the need to transfer the VERs has been fully explained to <i>me</i> and upon <i>my</i> full comprehension of the concept I am well aware that this will relinquish <i>my</i> current and future claim to the VER revenue so generated.”</p> <p>The declaration uses words such as I, me and my, which gives a clear impression that the end-users of the technology has not been briefed about waiver of their carbon rights in exchange for pricing of the improved technology which discounts its true cost in a clear and transparent manner by the indirect channel of communications chosen by the PP. An explanation is required.</p> <p>2. PP in his response states that the circle of indirect communication by including village chiefs in addition to county representatives who in turn will affirm the waiver of carbon rights on the behalf of end-users of technology. Moreover PP states <i>“the PP shall enter agreements with these officials and have the signed agreements placed at market centres to ensure that the end users are aware that the VER revenue has been transferred to the PP”</i>.</p> <p>As the proposed project activity is under implementation for more than 2 years (since September 2009), PP shall provide copies of duly signed letters by county representatives, village elders and chiefs affirming waiver of carbon rights by the villages/communities/counties and also provide evidence that same was communicated to the people i.e., end user of the technology through display at market centres / community hall / office of village administrative heads.</p> <p>CAR is open.</p>
<p>Corrective Action #6</p>	<p>1. The PP has revised the language within the VER transfer agreements between the PP and end users, which will be signed by the chiefs/ country representatives. A sample letter has been presented to the DOE to demonstrate compliance with the Gold Standard methodology rules. The letters clearly call for the elected representatives to participate in a forum or meeting at which the VER transfer will be explained to the community members.</p> <p>2. The VER transfer mechanism that involves village chiefs and or county representatives has not started yet. Government structures are not fully operational since the last general election. The PP has however collected direct user to PP VER transfer agreements and has provided these as evidence of the same. In this regard the PP requests a FAR on the indirect VER transfer agreements which will be availed prior to first verification.</p>

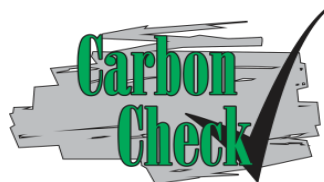


Finding	6
DOE Assessment #6	<p>Duly signed copies of carbon rights waiver agreement between ACF and individual end-user have been provided.</p> <p>However with respect to VER transfer mechanism involving indirect communication i.e., through county representatives and village chiefs, no evidence has been provided. Hence a FAR has been raised.</p> <p><i>FAR 1:</i> <i>During first verification the verifying DOE shall verify and confirm VER transfer (waiver of carbon rights by end users of the technology) involving indirect communication mechanism i.e., through county representatives and village chiefs, The verifying DOE shall also verify how the end users of the technology were informed about waiving off their carbon rights by county representatives and village chiefs.</i></p>
Conclusion <i>Tick the appropriate checkbox</i>	<input checked="" type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input type="checkbox"/> The finding is closed

Finding	7		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Condition 5 of the applied methodology has not been addressed in the PDD.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Section B.2 of the PDD has been amended to describe the project activities correspondence to the eligibility criteria.		
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>With respect to applicability condition number 5 of methodology as mentioned in section B.2 of revised PDD. The PP shall explain the fulfillment of following conditions:</p> <ol style="list-style-type: none"> 1. Mechanism, which has been or will be put into place to encourage the removal of the old technology (e.g Discounted price for the improved technology) and ensure definitive discontinuity of its use? 2. Provide a clear description of the mechanism or approach opted for in the PDD. 3. Clear and transparent monitoring procedures to ascertain extent to which the baseline technology is still in use after the introduction of the improved technology, whether the existing baseline technology is not surrendered at the time of the introduction of the improved technology, or whether a new baseline technology is acquired and put to use by targeted end users during the project crediting period 4. Provision for calculation of project emission on account of continued use of old technology in parallel with improved technology. 		

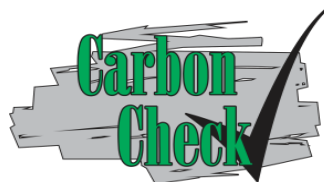


Finding	7
Corrective Action#2	<ol style="list-style-type: none"> 1. The “old technology” is the use of traditional stoves to boil water. As stated in the PDD the PP cannot effectively discourage the practice of using traditional stoves because the stoves are still used to cook food. The PP contends the impracticability of this clause in the project scenario in the same spirit as is expressed in footnote 5 of the methodology as follows: “The removal and continued non-use of three stone fires and other easily constructed traditional devices is in many cases unlikely and impractical to monitor”. 2. The PP elects not to encourage displacement of baseline traditional stoves but rather to encourage continued use of the water filters so as to displace the practice of boiling water using the traditional stoves. 3. The PP will monitor continued use of traditional stoves via the monitored parameters Q,p,rawboil, y and Q,p,cleanboil y which quantify the amount of raw water and purified water boiled using the baseline technology. 4. The PP will monitor raw and clean water boiled in the project scenario and use these mean estimates for calculation of project emissions.
DOE Assessment #2	<p>The project activity involves reduction in use of non-renewable biomass for the purpose of boiling water to make it potable and safe through installation and distribution of SAM Filters and Bio Sand filters. The most common method of boiling water in absence of filters is through traditional stoves. But the major use of traditional stoves is for the purpose of cooking. So, distribution or installation of filters will not result in removal of stoves or would encourage the end-users to discontinue its usage. The same is in line with the footnote 5 of the applied methodology, which states <i>“The removal and continued non-use of three stone fires and other easily constructed traditional devices is in many cases unlikely and impractical to monitor”</i>.</p> <p>CAR point 1, 2 and 3 are closed.</p> <p>4. Calculation of project emission on account of continued use of old technology in parallel with improved technology will be done through monitoring of raw and clean water boiled in the project scenario and using their mean values. The same is acceptable.</p> <p>CAR point 4 is closed.</p>
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed



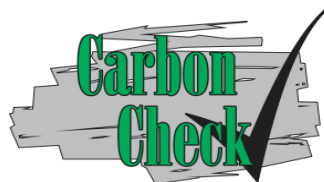
Finding	8		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to update Table 1 in Section B.3 of the PDD as GHG emissions, attributable to production and transportation of the fuel wood are not included in the emission reductions calculations.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Table 1 in Section B.3 of the PDD has been amended pursuant to this request.		
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	There is no difference found between baseline and project table under section B.3. as per these tables CO ₂ , CH ₄ and N ₂ O are the important sources of project emissions, whereas as per ER sheet, project emissions are zero. Project Proponent is requested to justify the same. Moreover, a description and flow diagram of project boundary is missing under section B.3 of the revised PDD hence departing from the PDD filling guidelines. CAR 8 is open.		
Corrective Action #2	Section B.3 has been amended pursuant to this CAR. The second table under Table 1 has been amended pursuant to remove any inclusion of CO ₂ , CH ₄ and N ₂ O in the calculation of project emissions. A flow diagram describing both the baseline scenario and the project boundary have been included.		
DOE Assessment #2	PP has taken the corrective action appropriately now and is found to be in accordance to the description provided in the PDD. CAR is closed		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed		

Finding	9		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The Baseline Survey report of the paired sample approach to determine the baseline target population characteristics, as referred to in the PDD, Section B.4., has not been submitted to DOE for validation.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Scanned copies of the baseline surveys have been presented to the DOE.		

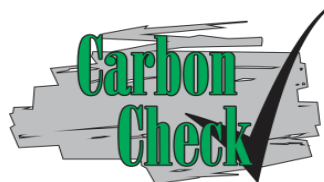


Finding	9
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Validation team has not received the scanned copies of the baseline survey document. CAR 9 is open.
Corrective Action #2	Scanned copies have been availed to the DOE.
DOE Assessment #2	PP has submitted 3 sample copies of questionnaire signed by the individuals; however PP is required to provide the full detailed report of the baseline survey conducted. CAR is Open
Corrective Action #3	The PP has provided the summary worksheets supporting the data provided in Annex 3 of the PoA DD.
DOE Assessment #3	The PP has described about the baseline survey and sample and worksheets of calculation to arrive at the conclusions provided in Annex-3 of the PDD. However, PP is required to provide the references of different colour and legend use in excel sheet. CAR is Open
Corrective Action #4	The colour coding in the excel sheets have been removed. The colours provided earlier were for internal analysis but with no external meaning attached to them.
DOE Assessment #4	The provided colours in the excel sheet has been removed by PP. and same has been confirm from sheet, that colours was used for internal purpose.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

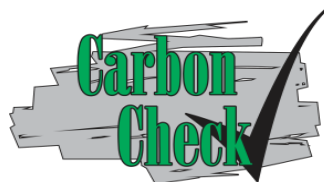
Finding	10		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Not all of the non-neutral indicators have been included in the Sustainability Monitoring Plan as per GS Rules & Toolkit.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The GS Passport has been revised pursuant to the provisions of CAR 10.		



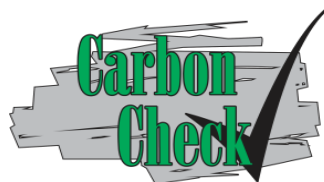
<p>DOE Assessment #1 (validators) <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added</i></p>	<p>GS passport is checked against the GS rules, toolkit and GS forms, and following departures and mistakes are found regarding the same:</p> <ol style="list-style-type: none">1. Cover page of the GS passport is being repeated.2. All the abbreviations used in the GS passport are not explained at the place of their first use.3. In section C.1 project registration type considered by PP is regular, however as per GS toolkit ver.2.1, "If your project activities are already operational or if your project applies for Gold Standard registration after the start of construction or implementation, you must apply for retroactive Gold Standard registration. Please clarify if the type of registration taken is correct.4. Section D.1 of the revised GS passport is not containing all the counties covered in the project as per revised PDD.5. Section D.2 of the revised GS Passport a legend table explaining the meaning of 1,2,3,4..and so on is not presented with map. 1, 2, 3, 4..are not able to provide a transparent information in terms of project location.6. Local stakeholders consultation report is missing under section E.1 of the revised GS Passport.7. Font used under section E.2 is not correct.8. Section F.1 of the revised GS passport, a complete information is not presented as per annex H version 2.19. Under section F.2 of the revised GS passport, "water quality and quantity", separate explanations for MDGs 4, 5, 6 and 7 are missing under chosen parameter and explanation.10. Under section F.2 of the revised GS passport, "Quality of employment" a separate explanation for how, considered MDGs 3, 4, 5, 6 are being fulfilled, is missing.11. Under section F.2 of the revised GS passport, "Livelihood of the poor" an explanation how MDG 2 is being fulfilled, is missing.12. Under section F.2 of the revised GS passport, "Technology transfer and technological self-reliance" an explanation how MDG 3 is being fulfilled, is missing.13. A justification why data sources for other pollutants and biodiversity are not mentioned in the table "Justification choices, data source and provision of references" are not provided under section F.2 of the revised GS passport.14. In the same table data sources that are training manuals/certificates for the employees under the project activity mentioned for quality of employment are not submitted to the validation team.15. Project proponent refers to which monitoring report under "Access to affordable and clean energy services"? Please clarify.16. Project proponent has not submitted all the supporting documents mentioned under section G of the revised GS passport to the validation team.17. Table for indicator no. 8 under section G, score of the indicator is not mentioned.18. Under section H.1 "Additionality" of the revised GS passport, PP mentioned that the latest version of additionality tool is V.05.2, EB 39 annex 10. which is not correct.
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Corrective Action #2	<p>The following amendments have been made to the GS passport:</p> <ol style="list-style-type: none">1. The repeated cover page has been deleted2. All abbreviations have been explained at the first instance3. All BioSand filters distributed prior to the project start date were distributed under the pilot programme. As is well defined in the ER calculation sheet, Emissions reductions shall only be claimed for BioSand filters distributed after the project start date (namely the 20th of September 2011.)4. Section D.1 of the Passport has been revised pursuant to the CAR.5. Section D.2 of the GS Passport has been amended pursuant to the request.6. The assessment of stakeholder comments has been included in Section E.1 of the GS Passport.7. Section E.2 of the Passport has been revised to remove the bold in the font.8. Annex H provide multiple guiding questions, which should be analyzed for the Do no Harm assessment. Accordingly the PP selected the guiding questions, which were most relevant to the project t activity. The PP divided the guiding questions into four categories namely human rights, labor standards environmental protection and anti-corruption for simplification. Accordingly all the compulsory questions (in bold black on annex H) were answered using relevant guiding questions (listed below the major questions.)9. Section F.2 has been revised pursuant to request with regards to water quality and quantity10. Section F.2 has been revised pursuant to request with regards to quality of employment11. Section F.2 has been revised pursuant to request with regards to livelihood of the poor12. Section F.2 has been revised pursuant to request with regards to technology transfer and technological self-reliance13. Section F.2 has been revised pursuant to the CAR.14. Training manuals and sample certificates have been issued to the DOE15. Section F.2 of the GS Passport has been revised pursuant to the CAR.16. All supporting documents have been submitted to the DOE.17. Section F.2 of the GS Passport has been amended pursuant to the CAR.18. Section H.1 has been amended pursuant to the CAR.19. Section H.2 has been amended.20. Annex 1 has been revised pursuant to the CAR.
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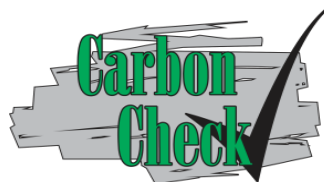
<p>DOE Assessment #2</p>	<ol style="list-style-type: none"> 1. The repeated cover page has been deleted. CAR point is closed. 2. Abbreviations have been found mentioned at the first instance in the passport. CAR point is closed. 3. PP is required to provide the distribution schedule for both the types of filter considered under this proposed project activity. Also, as stated start date of the project activity is 20/09/2011, PP is required to submit the supporting document for the same. CAR point is open. 4. The corrective action taken for this CAR point is still not complete, not all the counties mentioned has been found mentioned in the table under section D.1 of the passport. Whereas, the GPS coordinates as per the requirement in template is not mentioned. CAR point is open. 5. Map with the legends is found appropriate now. CAR point is Closed. 6. Requirement of the passport template has been fulfilled under section E.1 of the passport. However, in the questionnaire, name of the PP is mentioned as ACI, whereas in the PDD and several other places PP has been named as ACF. Please clarify. CAR point is open 7. Corrective action under section E.2 has been taken appropriately. CAR point is closed 8. Section F.1 covers all the requirement as per Annex H. CAR point is closed. 9. Water quality and quantity refers the MDG 4 and 7 now under section F.2 of the passport, and appropriately explains the parameter chosen. CAR point is closed 10. Quality of employment refers the MDG 3 now under section F.2 of the passport, and appropriately explains the parameter chosen. CAR point is closed 11. Still under section F.2 of the revised GS passport, "Livelihood of the poor" an explanation how MDGs is being fulfilled, is missing. CAR point is Open 12. Still under section F.2 of the revised GS passport, "Technology transfer and technological self-reliance" an explanation how MDGs is being fulfilled, is missing. CAR point is open 13. Appropriate corrective action for pollutants and biodiversity has been taken by the PP. CAR point is open 14. Training manuals and certificate has been found appropriate to the validation team. CAR point is closed. 15. Referred total sales record for the "Access to affordable and clean energy services" is required to be submitted to the DOE. CAR point is open. 16. PP is required to refer the location in the submitted documents for the each referred information. CAR point is open. 17. Corrective action has been found appropriate. CAR point is closed 18. Appropriate corrective action by correcting the use of latest version of additionality tool has been done. CAR point is closed. 19. Corrective action is found appropriate. CAR point is closed 20. PP has attached the No ODA certificate, however it do not seem to follow the template guidance, corrective action is required to be taken. CAR point is open
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<p>Corrective Action #3</p>	<p>3. An attestation of a proposed distribution structure has been issued as a supporting document.</p> <p>4. The PDD and the Passport have been revised to include all the county names and their respective geographical coordinates</p> <p>6. At the time the local stakeholder consultation was conducted the PP was called Aqua Clara Foundation whereas the name subsequently changed to Aqua Clara Foundation in 2012. The comment that referred to ACI was issued by a stakeholder which is consistent with the timing of the LSC.</p> <p>11. Passport has been revised pursuant to the CAR.</p> <p>12. Passport has been revised pursuant to the CAR.</p> <p>13. Comment is not clear ... is the CAR closed?</p> <p>15. Request to present TSR as a FAR</p> <p>16. Section G is the sustainability monitoring plan and therefore a FAR is requested to avail this data at the first verification.</p> <p>20. The PP signed the Version 2.1 ODA template.</p>
<p>DOE Assessment #3</p>	<p>3. PP has provided the distribution schedule for both the types of filter considered under this proposed project activity. However PP is required to provide the stated start date of the project activity is 20/09/2011, with supporting document. CAR point is open.</p> <p>4. The corrective action taken for this CAR point is still not complete, not all the counties mentioned has been found mentioned in the table under section D.1 of the passport. CAR point is open.</p> <p>6. It is referring to the same name, even after same. However, in the questionnaire, name of the PP is mentioned as ACI, whereas in the PDD and several other places PP has been named as ACF. Please clarify. CAR point is open.</p> <p>11. In section F.2 of the revised GS passport, "Livelihood of the poor" an explained about MDGs is being fulfilled. CAR point is closed</p> <p>12. In section F.2 of the revised GS passport, "Technology transfer and technological self-reliance" an explained about MDGs is being fulfilled. CAR point is closed</p> <p>13. Appropriate corrective action for pollutants and biodiversity has been taken by the PP. CAR point is closed</p> <p>15. PP is required to provide the TSR till date. CAR point is open.</p> <p>16. The justification from PP indicates that if the project registration and subsequent issuance is delayed there will be no monitoring of SD indicators till the time the same is achieved, whereas the distribution / sale of filters began in October 2011. It indicates that VER revenues do not affect the implementation and feasibility of the project activity. In light of the above observation PP should justify the reason behind the approach being adopted for monitoring of SD indicators and request for a FAR. CAR point is open.</p> <p>20. PP has provided signed ODA in correct template. CAR point is closed</p>



Corrective Action #4	3. An attestation of a proposed distribution structure has been issued as a supporting document. 4. A complete list of all the counties in the project boundary has been inserted in Section D of the passport. 15. The PP has provided the TSR and supporting documents for the requisite SD indicators. 16. The PP has provided all referenced footnotes and supporting documents to meet compliance with the stated CAR.
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DOE Assessment #4

3. PP has provided the distribution schedule for all types of filter considered under this proposed project activity and also provided declaration letter for it. However, the start date of the project activity in both GS Passport (Section C.5) and PDD (Section C.1) has been revised to 20/09/2009. PP shall provide documentary evidence to substantiate the same and also explain how it is in line with guidance provided under paragraph 67 of EB 41 meeting report.

Moreover as per the description in section C.5 of GS Passport the project activity opts for a retroactive registration. PP shall provide the GS approved pre-feasibility assessment report to substantiate the same. Hence CAR is open.

4. PP has provided all the counties mentioned has been found mentioned in the table under section D.1 of the passport. CAR point is closed

15. PP has provided the excel sheet of TSR for the requirement of SD indicators. CAR point is closed

16. The response from the PP is not in line with the issue raised during the 3rd DOE Assessment. As, the project has already started on 20/09/2011, PP needs to provide documents to substantiate that the monitoring requirements for the SD parameters have been fulfilled. Section G (Sustainability Monitoring Plan) of GS Passport states the following:

No.	Indicator	Monitoring Method	Frequency
1.	Air Quality	Monitoring surveys	Annually
2.	Water quality and quantity	Water Quality tests	Annually
3.	Quality of Employment	Training Manual	As frequently as required with a minimum review once a year.
4.	Livelihood of the poor	Closed questionnaire interviews during monitoring surveys.	Annually
5.	Access to affordable and clean energy services	Total Sales Records	Annually

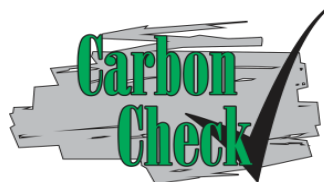
CAR point is open



<p>Corrective Action #5</p>	<p>1. The Passport and the PDD have been changed from 20/09/2009 to 20/09/2011. This date has been selected within the GS toolkit provisions for retroactive projects having a start date to a maximum of 2 years prior to the date of registration. The PP did not have to do a pre-feasibility assessment as the fast track option was selected. A signed MOU by the GS for the project activity has been presented in support of this claim and the official status of the project has been marked on the registry as retroactive on the GS registry</p> <p>16. The PP has revised the sustainable development monitoring tables to demonstrate that the parameters will be monitored annually after the first monitoring survey.</p>
<p>DOE Assessment #5</p>	<p>1. PP has revised the starting date from 20/09/2009 to 20/09/2011 in accordance with the GS toolkit provisions of having a start date, 2 years prior to the date of registration for retroactive project. In essence the PP expects the project to be registered with GS by 20/09/2013 to meet the retroactive guidelines of GS foundation. This seems highly unlikely, in view of the ongoing validation exercise PP needs to substantiate the suitability of the selected start date for the project activity. Moreover PP shall also explain how it is in line with guidance provided under paragraph 67 of EB 41 meeting report.</p> <p>Hence CAR is open.</p> <p>16. PP has revised the sustainable development monitoring tables that the parameter will be monitored annually after the first monitoring survey. However, as PP has opted for retroactive project cycle as per GS and would be claiming retroactive credits. In view of the above observation PP shall explain:</p> <ul style="list-style-type: none"> • Time frame for 1st monitoring survey i.e., when will it be undertaken? • How the SD indicators have been monitored for the period between start date of the project and date of registration i.e. retroactive crediting period. <p>Hence CAR is open.</p>
<p>Corrective Action Number #6</p>	<p>1. The start date has been revised from September 2011 to November 2011 in anticipation of a registration date in mid-November.</p> <p>16. The first monitoring survey will commence in the last quarter of the 2013 calendar year. The SD monitoring periods have been revised from annual dates to biennial monitoring. In so doing the timelines for SD monitoring for the retroactively credited water filters will be met in the first monitoring surveys conducted in 2013.</p>



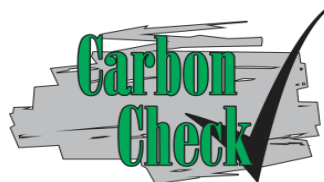
<p>DOE Assessment #6</p>	<p>1. The PP has revised the start date from 20/09/2011 to 20/11/2011 in accordance with the GS toolkit provisions of having a start date, 2 years prior to the date of registration for retroactive project. However PP shall also explain how the chosen starting date is in line with the guidance provided under paragraph 67 of EB 41 meeting report.</p> <p>CAR point is open</p> <p>16. PP in his response has revised the monitoring frequency of SD indicators from annually to biannually in the GS Passport. However the same is not acceptable to the DoE because the frequency of monitoring of SD indicators as mentioned in the Local Stakeholder Consultation (LSC) Report and GS Passport is annual. So, PP shall provide the monitoring report for SD indicators for the period between start date of the project and date of registration i.e. retroactive crediting period.</p> <p>CAR point is open.</p>
<p>Corrective Action Number #7</p>	<p>1. In section C.1.1 of the PDD, PP has revised the starting date of project activity as 26/06/2009. This is the date on which distribution of the filters start date under the proposed project activity started. As the proposed project activity is seeking retroactive credits, the starting date of the crediting period has been revised to 16th December 2011 (a date 2 years prior to the expected date of registration of the proposed activity with Gold Standard Foundation).</p> <p>A clarification was sought from GS on the same by PP and the reply of GS has been forwarded to the DOE.</p> <p>16. The PP sought clarification from the Gold Standard on the matter and forwarded the same to the DOE. Pursuant to the request the PP amended the passport to reflect that a two-year monitoring period for SD monitoring of retroactive credits.</p>



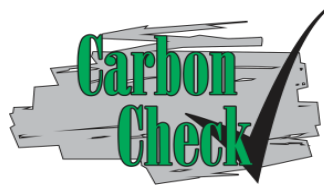
<p>DOE Assessment #7</p>	<p>1. PP has revised the starting date of the project activity as 26/06/2009 (the date when first filter under the project was distributed). And was validated through review of sales / distribution records of the water filters. The same is found to be in line with the guidance provided under paragraph 67 of EB 41 meeting report. Moreover the start date of the crediting period has been revised to 16/12/2011 i.e., 2 years prior to the expected date of registration as the project is seeking retroactive credits. The same is in line with requirements of GS Toolkit.</p> <p>Furthermore the PP has submitted the clarification mail from GS to substantiate the same. CAR point is closed.</p> <p>16. PP has revised the monitoring frequency for SD indicators from annually to biannually for the retroactive crediting period. The same was done after PP received a clarification from the Gold Standard Foundation on the same issue. The revised text for monitoring frequency reads as: “Annually beginning from the first monitoring surveys conducted for the project activity⁵”.</p> <p>However a FAR has been raised with regards to the monitoring of SD indicators for the retroactive crediting period.</p> <p><u>FAR 2:</u></p> <p><i>The verifying DOE shall assess and confirm that the monitoring of SD indicators for the retroactive crediting period has been done in accordance with sustainability monitoring plan stated in section G of the Gold Standard Passport.</i></p>
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input checked="" type="checkbox"/> To be checked during the first periodic verification</p> <p><input type="checkbox"/> Outstanding finding (not closed)</p> <p><input type="checkbox"/> The finding is closed</p>

<p>Finding</p>	<p>11</p>		
<p>Classification</p>	<p><input checked="" type="checkbox"/> CAR</p>	<p><input type="checkbox"/> CL</p>	<p><input type="checkbox"/> FAR</p>
<p>Description of finding <i>(Validators)</i></p>	<p>A consolidated CAR 11 is raised as following departures in the PDD from PDD filling guidelines/GS requirements are found to the validation team:</p> <p>1. Baseline scenario is missing under section A.2 is missing.</p>		

⁵ The PP was not able to conduct annual sustainable development monitoring and as such the frequency of monitoring of the retroactively credited filters shall be biennially monitored in the first monitoring exercise and thereafter monitored annually.



Finding	11
	<ol style="list-style-type: none"> 2. View of PP on contribution of project activity to sustainable development. 3. In section A.3 it is not clear if Aqua Clara Foundation is public or a private entity. 4. In section A.4.3 scenario existing prior to project activity with a list of systems in operation at that time is missing and point C of section A.4.3 of PDD filling guidelines is not being covered in the PDD. 5. Table heads under section A.4.4 are not correct as per PDD filling guidelines. 6. Under section B.2 last applicability criteria of the methodology is point no. 3 of annex 3, also its justification says that “equation 1 of section B.3...” validation team could not found any equation 1 in section B.3 of the PDD. 7. In the same section under “the target area”, last line is not clear and reframing of this is needed. 8. Footnote no. 20 supporting document is not found to the validation team and footnote 21 is not getting opened at the time of assessment. 9. Footnote 22 is referred in the first line on page no. 16 (under heading the fuel production and collection areas) is not found in the PDD, and source of table 2 of the same section is not provided. 10. Source of deficit level of 66.12% is also not clear in the same section. 11. Under section B.4 PP has not provided description of the technology to be employed and hence not fulfilling criteria of PDD filling guidelines. 12. Footnote no. 25, validation team could not found statistics of 71 to 82% of the people who would prefer to boil drinking water if resources are readily available. 13. Footnote no. 26, document “A Randomize Evaluation of Source Water Quality Improvement” is not found to the validation team. 14. All the tables and figures are to be numbered and captioned. 15. Project activity baseline survey, table is not having any heads and from where these percentages have come, is not clear to the validation team. 16. Under section B.6.1, how the procedures in the GS approved methodology to calculate PE, BE, LE and ER are applied to the proposed project activity. Equation which are used to calculate emission reductions are to be presented in this section. 17. In the revised PDD PP has not provided references of the equations used. 18. Section B.6.4, table used is not as per PDD filling guidelines. 19. Section B.7.1 first monitoring parameter, data unit is not correct as per applied GS methodology. 20. In the same section 2nd parameter, data unit is not correct as per applied GS methodology. 21. In the same section 3rd parameter, data unit is not correct as per applied GS methodology. 22. In the same section 3rd and 4th parameters, description of the parameters are not as per applied GS methodology. 23. In the same section 5th parameter, QA/QC procedure are not completely provided as per applied GS



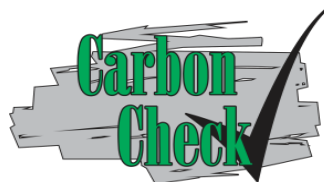
Finding	11
	<p>methodology, and it is not clear to the validation team, that PP is referring which monitoring report.</p> <p>24. In the same section, last monitoring parameter, QA/QC procedure provided by the PP is not clear to the validation team, kindly rephrase or transparently describe the same.</p> <p>25. Section C.1.1, please also provide basis for taking the start date of the project activity.</p>



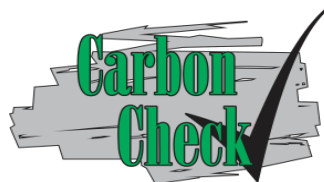
Finding	11
<p>Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i></p> <p>FM 4.9 Validation Report Template Gold Standard</p>	<ol style="list-style-type: none"> 1. Section A.2 has been revised pursuant to the CAR. 2. Section A.2 has been revised pursuant to the CAR. 3. The Aqua Clara foundation who is the sole Project Participant is private low profit organization. Supporting evidence has been given to the DOE to validate this claim. 4. Section A.4.3 of the PDD has been revised pursuant to the CAR. 5. Section A.4.4 has been revised pursuant to the CAR. 6. Section B.2 of the PDD has been amended pursuant to the CAR. 7. Section B.2 of the PDD has been amended pursuant to the CAR 8. These now appear as footnotes 21 and 22 and the same have been provided to the DOE. 9. A soft copy has been submitted to the DOE as well which is the same reference for Table 7 which is was formerly Table 2. 10. The value has been amended from 66.12% to 64.322% as the average of the 5 targets within the primary target areas defined in the same section of the PDD. 11. Project technologies have been included as per the CAR. 12. Correct reference is to Footnote 27. The soft copy has been submitted to the DOE with a clear reference to Page 14 of the reference file. 13. Correct reference is to Footnote 28. The soft copy has been submitted to the DOE with a hyperlink attached to the footnote for easier reference 14. All the tables in the PDD have been captioned and numbered. 15. Table 8 has been amended pursuant to the CAR. 16. A summary of the equations used to calculate emissions reductions has been included in Section B.6.1 17. All equations were directly drawn from the baseline methodology TPDDTEC. All equation shave been numbered in order of their appearance. The only equations not drawn from the methodology have been referenced to the methodologies they are drawn from 18. Table 16 has been amended pursuant to the CAR. 19. Section amended pursuant to CAR. 20. Section amended pursuant to CAR. 21. Section amended pursuant to CAR. 22. Section amended pursuant to CAR. 23. Section amended pursuant to CAR. 24. Leakage has been removed as a monitored parameter and the justification is provided in the monitoring plan. 25. Section C.1 has been amended pursuant to the request. <p>114</p> <p>N° CCL0138/ACWPP/22022012, Rev. 03</p>



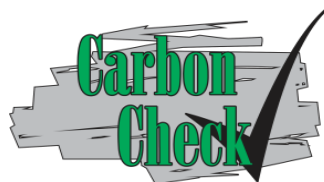
Finding	11
<p>DOE Assessment #1 (validators) <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p> <p>FM 4.9 Validation Report Template Gold Standard</p>	<ol style="list-style-type: none"> 1. Baseline scenario has been found appropriately mentioned under section A.2 of the revised PDD. CAR point is closed 2. Appropriate description of the sustainable development has been mentioned under section A.2 of the revised PDD. CAR point is closed 3. Still in the revised PDD, PP has not mentioned whether Aqua Clara Foundation is a public or private entity. Moreover, in the table provided under section A.3 of the revised PDD, it is informed that party involved wishes to be considered as the project participant. PP is required to provide the documentary evidence for the same. CAR point is Open. 4. PP has mentioned point 'c' under section A.4.3, whereas point a and b have not been mentioned. PP is required to completely use the PDD filling guideline. CAR point is Open 5. Corrective action is taken. CAR point is closed 6. PP has corrected the description, however equation 1 is not found under section B.6.3. of the revised PDD. CAR point is Open 7. The last line referring is still not clear, rephrasing of the statement is required. CAR point is open 8. Footnotes are now corrected. CAR point is closed 9. Foot note 24 is not accessible. CAR point is Open 10. The corrective action is still not taken by the PP. CAR point is open 11. Technology description has been provided, however PP is required to submit the supporting document for the same. CAR point is open 12. Data used from other projects cannot be acceptable, proper reference to the publically available information is required to be provided. CAR point is open 13. Document has been submitted and found to be correct. CAR point is closed. 14. Still the figures are not named and numbered. CAR point is open 15. PP is required to provide the final approved report on the baseline survey conducted for the proposed project activity. CAR point is Open 16. The equation used under section B.6.1. has not been demonstrated appropriately the description of each symbol used is required to be provided. Also, PP is required to recheck the formula used. The appropriate corrections should also be done in the spread sheet. PP has not completely listed the data and parameters that are available at validation. Moreover PP is required to justify how the value of Fnr_b used in the calculation is conservative. CAR point is open 17. PP is required to state the same in the PDD. Rather it is recommended to use sequential numbering in the PDD and refer the equation numbers of the applied methodology. CAR point is open. 18. Still the table used is not found as per the PDD filling guideline. Labeling of the table is required to be corrected. CAR point is Open 19. Data unit is corrected, CAR point is closed. 20. Data unit is corrected, CAR point is closed. 21. Data unit is corrected, CAR point is closed.
<p>374 Rivonia Boulevard, Ground Floor, Block A, Rivonia, Johannesburg, 2128</p>	<ol style="list-style-type: none"> 22. Description of the 3rd and 4th parameters have been found corrected. CAR point is closed 23. QA/QC procedure has been found mentioned for the 5th parameter. CAR point is closed. 24. PP is required to justify non-inclusion of the parameter LE_{p,y} in the revised PDD under section B.7.1. CAR point is open 25. The basis of selecting start date of the project activity is not acceptable to the validation team. PP is required to



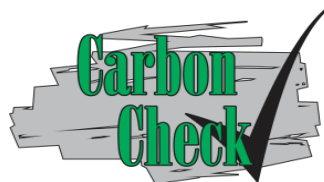
Finding	11
<p>Corrective Action #2</p>	<p>3. Page 3 of the Revised PDD highlights the fact that ACF is a non-profit private foundation. The Host Party is not a project participant Table 1 has been revised to reflect this.</p> <p>4. The PDD has been revised pursuant to CAR.</p> <p>6. Equation number has been revised to Equation 4 rather than Equation 1 for consistency between sections B.2 and B.6.</p> <p>7. The PDD has been revised pursuant to this CAR.</p> <p>9. All footnotes have been provided in soft copy for easier access.</p> <p>10. Pg 23 of the PDD has been amended to describe how these calculations were made.</p> <p>11. The PP has provided a white paper describing the features of the AM units. Two user manuals have also been provided as supporting documents for the BSF units.</p> <p>12. The data referenced was from a validated and verified GS project's baseline survey. This data is a publicly available and was sourced from the internet.</p> <p>14. All figures and tables in the PDD have been named and numbered.</p> <p>15. Please see annex 3 of the PDD.</p> <p>16. All the symbols in the equations demonstrated in section B.6.1 have been provided. The equations used are consistent with those on page 37 of the methodology. A default Fnr_b value of 0.92 has been used in accordance with the CDM Default values of fraction of non-renewable biomass.</p> <p>17. The PDD has been revised pursuant to the CAR.</p> <p>18. The PDD has been revised pursuant to the CAR.</p> <p>24. The PDD has been revised pursuant to the Corrective Action Request.</p> <p>25. To be discussed.</p> <p>26. Section A.4.1.4 has been revised pursuant to the CAR.</p>



Finding	11
<p>DOE Assessment #2</p>	<p>3. PP has revised the PDD and mentioned that Aqua Clara Foundation is a private organization and in section A.3 of the revised PDD the host party is not a project participant. However, PP is required to provide the documentary evidence for the same. CAR point is Open.</p> <p>4. PP has mentioned point a and b under section A.4.3 of the revised PDD. CAR point is closed</p> <p>6. PP has revised to equation 1 to equation 4 and it's found under section B.6.3.of the revised PDD. CAR point is closed</p> <p>7. PP has corrected the description. CAR point is closed</p> <p>9. Foot note 24 is deleted from revised PDD. CAR point is closed</p> <p>10. The deficit level is provided in PDD. CAR point is closed</p> <p>11. PP has provided the supporting document called "ACF SAM whitepaper.pdf" and manuals BSF. CAR point is closed</p> <p>12. Data used from other projects can not be acceptable, proper reference to the publically available information is required to be provided. CAR point is open</p> <p>14. All figures has been named and numbered. CAR point is closed</p> <p>15. PP is required to provide the final approved report on the baseline survey conducted for the proposed project activity. CAR point is Open</p> <p>16. The equation used under section B.6.1. has been demonstrated appropriately the description of each symbol used is required to be provided. The appropriate corrections have been done in the spread sheet. Moreover PP has justified the value of Fnr_b used in the calculation is conservative. However, PP has not completely listed the data and parameters that are available at validation. CAR point is open.</p> <p>17. PP has used the same number from methodology. CAR point is closed</p> <p>18. PP has corrected. CAR point is closed</p> <p>24. PP has provided the of the parameter Lep,y in the revised PDD under section B.7.1. CAR point is closed</p> <p>25. PP is required to provide the evidence of start date of the project activity. And also refer DOE Assessment#1 and comment provided in section C.1 of the PDD. CAR point is open.</p> <p>26. PP has provided the geo-coordinates of the project under section A.4.1.4 of the PDD. CAR point is closed</p>



Finding	11
Corrective Action #3	<p>3. The PP has provided the required supporting document</p> <p>12. The data referenced was used in support of a claim and not as a substantive or definitive value.</p> <p>15. The PP has provided excel worksheets in support of the claims made in Annex 3 of the document.</p> <p>16. The equation used under section B.6.1. has been demonstrated appropriately the description of each symbol used is required to be provided. The appropriate corrections have been done in the spread sheet. Moreover PP has justified the value of F_{nrb} used in the calculation is conservative. However, PP has not completely listed the data and parameters that are available at validation. CAR point is open</p> <p>25. The definition of the start date has been revised in section C.1 of the PDD.</p>
DOE Assessment #3	<p>3. PP has provided the incorporation certificate of the Aqua Clara Foundation. CAR point is closed.</p> <p>12. PP needs to explain what it means by the statement provided in response “Corrective Action #3”. CAR point is not closed.</p> <p>15. PP has provided the calculation sheet used to arrive at the conclusions provided in table in annex 3 (Baseline Information) of the PDD. CAR point is closed</p> <p>25. Start date of the project activity in both GS Passport (Section C.5) and PDD (Section C.1) has been revised to 20/09/2009. PP shall provide documentary evidence to substantiate the same and also explain how it is in line with guidance provided under paragraph 67 of EB 41 meeting report.</p> <p>Moreover as per the description in section C.5 of GS Passport the project activity opts for a retroactive registration. PP shall provide the GS approved pre-feasibility assessment report to substantiate the same.</p> <p>CAR is open.</p>
Corrective Action #4	<p>12. The PP has referenced data from another GS project. The data used was referenced in support of the data used by the PP which the PP collated though its own baseline survey. The data therein referenced was used to describe the baseline scenario to further substantiate the practice of boiling water in Kenya. The figures stated were not used by the PP in calculating emission reductions but rather as supporting evidence of the other literature review in the same section of the PDD.</p> <p>25. PP has revised the start date of the project activity to 20/09/2011 and will provide documentary evidence that shows the same. Under paragraph 67 of EB 41, the start date is defined as the date of first submission or when construction and any real action begins. The start date of this project activity is defined as the initiation of the distribution of the project technologies (filters), which has been backdated up to two years in accordance with the GS toolkit rules for retroactive projects. PP opted for and successfully secured a fast track listing with the Gold Standard. The fast track has been provided as a supporting document.</p>



Finding	11
DOE Assessment #4	<p>12. PP has explained about the data used for reference in the PDD from another GS project, hence the provided justification is acceptable to DOE.</p> <p>CAR point is closed.</p> <p>25. PP has revised the starting date from 20/09/2009 to 20/09/2011 in accordance with the GS toolkit provisions of having a start date, 2 years prior to the date of registration for retroactive project. In essence the PP expects the project to be registered with GS by 20/09/2013 to meet the retroactive guidelines of GS foundation. This seems highly unlikely, in view of the on-going validation exercise PP needs to substantiate the suitability of the selected start date for the project activity. Moreover PP shall also explain how it is in line with guidance provided under paragraph 67 of EB 41 meeting report.</p> <p>Hence CAR is open.</p>
Corrective Action Number #5	The start date has been revised from 20/09/2011 to 15/11/2011.
DOE Assessment #5	The PP has revised the start date from 20/09/2011 to 20/11/2011 in accordance with the GS toolkit provisions of having a start date, 2 years prior to the date of registration for retroactive project. However PP shall also explain how the chosen starting date is in line with the guidance provided under paragraph 67 of EB 41 meeting report.
Corrective Action Number #6	1. The PP has revised the project start date and submitted the GS clarification requested.
DOE Assessment #6	<p>In section C.1.1 of the PDD, PP has revised the starting date of project activity as 26/06/2009. This is the date on which distribution of the filters start date under the proposed project activity started.</p> <p>As the proposed project activity is seeking retroactive credits, the starting date of the crediting period has been revised to 16th December 2011 (a date 2 years prior to the expected date of registration of the proposed activity with Gold Standard Foundation).</p> <p>A clarification was sought from GS on the same by PP and the reply of GS has been forwarded to the DOE.</p>
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

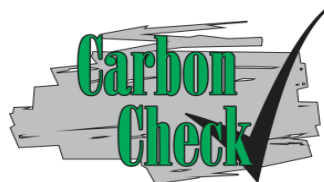


Finding	12		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Comment by Gold Standard Foundation: 1. Take note of frequency of using the unit while doing the WCFTs 2. Ensure that the treated water boiled is monitored 3. Ensure that the baseline surveys are not biased, use open-ended survey questions. The use of third party expert is recommended. 4. The PP needs to include a monitoring parameter to account for all water treatment options used by end users in the baseline scenario. 5. The PP should clarify if Water Consumption Field Tests shall be done annually 6. The PP shall update the GWP values 7. The PP shall change start date from 2009 to 2011 as is the cap for retroactive projects 8. The PP shall address the typographical errors in the passport and modify the language in the SDM (i,e remove all mention of Non Applicable criterion) 9. The PP shall demonstrate that the monitoring surveys are not biased		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	1. Addressed in question 1.a of the monitoring survey template attached. 2. Addressed in question 8 of the monitoring survey. 3. Monitoring survey has been provided to the DOE to ensure that the questions used will be open ended. A third party will not be used but every caution will be used to ensure no bias as indicated in the PDD 4. PDD has been amended to include the requested monitoring parameter. 5. PDD has been amended to specify this point. 6. GWP values have been updated as requested. 7. Project start date has been revised 8. All typographical errors have been revised. 9. The PP has provided a sample of the monitoring survey to demonstrate nonbias using open ended questions.		



Finding	12
<p>DOE Assessment #1 (validators) The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</p>	<ol style="list-style-type: none"> 1. The monitoring survey questionnaire under question 1.a asks about the frequency of use of the water filter unit. 2. The monitoring survey questionnaire under question 8 asks whether water purified using filters is still boiled. 3. PP has provided the monitoring survey questionnaire which uses open-ended questions to extract information from the end-user. The review of the questionnaire reflects that there is no bias. 4. PP has revised the PDD to include a monitoring parameter to account for all water treatment options used by end users in the baseline scenario. 5. PP has amended the PDD to reflect that WCFT will be conducted annually. 6. PP has revised the PDD to use updated GWP values for CH₄ and N₂O. 7. PP has revised the start date of the project activity to 26/06/2009 in section c of the PDD. 8. PP has revised the PDD and all typographical errors have been corrected. 9. A sample copy of monitoring survey questionnaire has been provided by PP. The questionnaire includes open-ended questions which demonstrate that there is no bias involved.
<p>Conclusion Tick the appropriate checkbox</p>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

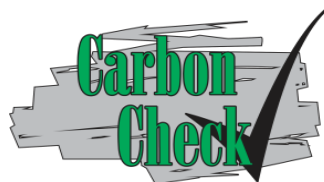
Finding	1		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding (Validators)	The project participant is requested to clarify the correct title of the project activity.		
Corrective Action #1 (PP shall write a detailed and clear corrective action as per finding)	The PDD and Passport have been amended pursuant to CL 1. The correct title of the project is that which appears on the GS registry as follows: Aqua Clara Water Filtration Program in Kenya.		
DOE Assessment #1 (validators) The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.	<p>PDD and GS passport is checked by the validation team and title of the project activity is found revised as per GS registry.</p> <p>CL 1 is successfully closed.</p>		



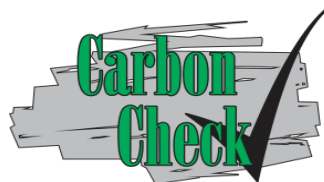
Finding	1		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed		

Finding	2		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to clarify the date of the complete PDD and its version for validation by the DOE.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The PDD has been amended to indicate Version 2 and the date has been amended to reflect the 10th of October which is the date the revised PDD has been submitted to the DOE.		
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	PDD is found revised in terms of date and version number. CL 2 is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed		

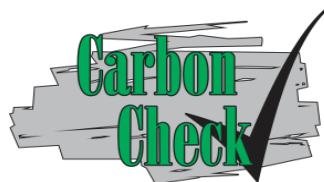
Finding	3		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to clarify on the start date of the project activity through submission of supporting evidence thereof.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The start date of the project activity is defined as the date of submission of the LSC report which is the 20th date of September 2011. As a regular project cycle the start date of the project activity is the date at which the LSC report was submitted.		



Finding	3
<p>DOE Assessment #1 (validators) <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>Validation team is not clear if project started its real operation on 21st September 2011 and documents were also uploaded for pre-feasibility assessment on GS website on the same date? Kindly clarify with proper chronology of events if project is going for a retroactive registration or a regular registration and accordingly provide the start date of the project.</p>
<p>Corrective Action #2</p>	<p>The chronology of events for the project activity is as follows:</p> <ul style="list-style-type: none"> • Pilot phase commences: late 2008 • Registration of Sustainable Deployment of the LifeStraw Family in rural Kenya – February 2011 (similar project technology) • Letter from the Board of Directors to Viability Africa confirming interest in pursuing carbon credits • Methodology approved – 04th April 2011 • LSC hosted – May 7th 2011 • LSC submitted – 20th September 2011 <p>There was no pre-feasibility assessment conducted because all activities prior to the LSC submission were considered as pilot phase activities rather than real implementation of the project activity.</p>
<p>DOE Assessment #2</p>	<p>PP is required to clarify how the differentiation between pilot phase and real case proposed project activity has taken place. Following documents are required to be submitted:-</p> <ol style="list-style-type: none"> 1. Board decision for moving from pilot phase to real phase, considering the GS-VER. 2. Contract agreement between the entrepreneurs and PP for the sale of the filters in real phase implementation. 3. Proof of sale record made till date. 4. Scheduled sale of both kind of filters throughout the crediting period. <p>CL is open</p>
<p>Corrective Action #3</p>	<p>To be discussed with the DOE:</p> <ol style="list-style-type: none"> 1. A letter has been provided affirming the Board's interest in developing carbon credits. 2. There are no new contracts as the same entrepreneurs were retained in the expansion phase. 3. Total Sales Records shall be availed to the DOE. 4. Projected sales are included in the emissions reductions spreadsheets.

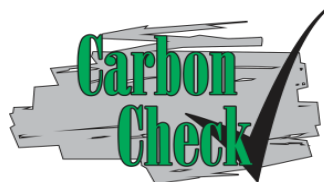


Finding	3
DOE Assessment #3	PP is required to submit above mentation document. CL is open
Corrective Action #4	The PP has submitted the TSR and revised the start date definition.
DOE Assessment #4	PP has submitted the excel sheet of TSR. However, PP is required to clarify these question below: 1. Start date of the project activity mentioned in section C.1 of revised PDD is 20/09/2009. PP shall explain how it meets the definition of start date in accordance with Requirements of GS version 2.1 or the definition provided in CDM glossary of Terms (Version 07; EB 70, Annex 07). 2. The start date of the crediting period as mentioned in section C.2.1.1 of revised PDD is 20/09/2011 which is before the date of registration of project activity under Gold Standard. This is a clear case of retroactive project cycle. In light of the above observation PP shall explain why a pre-feasibility study was not conducted as per the requirement of GS version 2.1
Corrective Action #5	<ol style="list-style-type: none"> 1. Start date of the project activity is 20th September 2011. Under the retroactive project cycle the project start date can be upto 2 years prior to registration. A signed MOU confirming the retroactive nature of the project activity under the fast track option has been submitted to the DOE in support of this claim. 2. The project activity is retroactive. The PP has successfully secured fast track listing with the Gold Standard. The signed MOU has been provided as a supporting document under CAR 3 (2).
DOE Assessment #5	<ol style="list-style-type: none"> 1. PP has revised the starting date from 20/09/2009 to 20/09/2011 in accordance with the GS toolkit provisions of having a start date, 2 years prior to the date of registration for retroactive project. In essence the PP expects the project to be registered with GS by 20/09/2013 to meet the retroactive guidelines of GS foundation. This seems highly unlikely, in view of the ongoing validation exercise PP needs to substantiate the suitability of the selected start date for the project activity. Moreover PP shall also explain how it is in line with guidance provided under paragraph 67 of EB 41 meeting report. Hence CAR point is open. 2. The PP has successfully secured a fast track listing with GS foundation. The same was verified through review of GS registry website. The PP has also provided a signed MoU (dated 17/06/2013) between the GS and ACF for the same. The review of registry website also confirms that the project activity is a retroactive one. CAR point is closed.
Corrective Action Number #6	1. The start date has been revised from 20/09/2011 to 15/11/2011.



Finding	3
DOE Assessment #6	The PP has revised the start date from 20/09/2011 to 20/11/2011 in accordance with the GS toolkit provisions of having a start date, 2 years prior to the date of registration for retroactive project. However PP shall also explain how the chosen starting date is in line with the guidance provided under paragraph 67 of EB 41 meeting report.
Corrective Action Number #7	1. The PP has revised the project start date and submitted the GS clarification requested.
DOE Assessment #7	In section C.1.1 of the PDD, PP has revised the starting date of project activity as 26/06/2009. This is the date on which distribution of the filters start date under the proposed project activity started. As the proposed project activity is seeking retroactive credits, the starting date of the crediting period has been revised to 16 th December 2011 (a date 2 years prior to the expected date of registration of the proposed activity with Gold Standard Foundation). A clarification was sought from GS on the same by PP and the reply of GS has been forwarded to the DOE.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	4		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to substantiate that the quality of the water treated by the project technology is equal to or better than the quality of the drinking water in the pre-project scenario, by submission of e.g. laboratory test-results.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Test results taken from both the SAM and BSF units as compared to sample units collected from local water sources demonstrate a 96% - 100% reduction in coliforms.		
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Project Proponent has submitted the excel sheet of the analysis of the post treated water, but copy of these test reports are need to be submitted in order to substantiate this analysis. CL 4 is open.		



Finding	4
Corrective Action #2	Test results have been submitted to the DOE.
DOE Assessment #2	<p>Following are the observations on the test certificate submitted:-</p> <ol style="list-style-type: none"> 1. All the sample test certificate submitted do not substantiate for the type of filters under observation. PP is required to clarify this. 2. The sample test certificates in the folder named BSF water tests, do not substantiate whether the test has been conducted for the proposed project activity and the type of filters under observation. Title of the folders does not lead to the correct year of test. PP is required to clarify these issues. 3. PP is required to clarify whether any test has been conducted at the pilot phase of the proposed project activity. 4. PP is required to provide the detail of sampling approach taken for the testing. Full certified test report is required to be submitted. <p>CL is open</p>
Corrective Action #3	<ol style="list-style-type: none"> 1. Sample certificates have been provided for either technology type the tests sample certificates. The two tests types do not identify the type of filter but the test dates do separate the testing regimes and the test results have been separated in the supporting documents provided to the DOE. 2. The tests were conducted for both technology types. The correct labeling has been applied to differentiate tests types. 3. The PP confirms that the BSF testing was done in 2007 which is the pilot phase. 4. Please see annex 3
DOE Assessment #3	<ol style="list-style-type: none"> 1. PP has provided clarification on sample test certification and same has been check from provided document. 2. PP, answer is not clear to the DOE on above question. PP is required to clarify the same issues. 3. OK 4. PP has provided the brief sampling approach in the annex 3 of the PDD. However, PP is required to provide the Full certified test report is required to be submitted. <p>CL is open</p>
Corrective Action #4	<ol style="list-style-type: none"> 2. The PP has properly labeled the Water tests for either technology type. 4. Excel sheets have been provided to support the claims in Annex 3 of the PDD



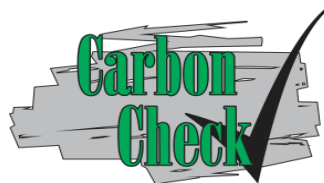
Finding	4
DOE Assessment #4	<p>2. PP has provided the water test for BSF Water tests dated 16/03/2007 from Central Water Testing Laboratories, Ministry of water Irrigation and for SAM dated 31/05/2012 from Nairobi City water & Sewerage company Ltd. Hence, CL is closed.</p> <p>4. PP needs to provide the entire test certificates to substantiate that the quality of the water treated by the project technology is equal to or better than the quality of the drinking water in the pre-project scenario.</p> <p>CL point is not closed.</p>
Corrective Action #4	The PP has provided a report of the test results from either organisations to substantiate that the quality of water treated by the project activity is better than the quality of water in the baseline scenario. A sample of raw water was tested and the level of coliforms recorded. Then the raw water was tested using either technologies or the level of coliforms recorded. The results and the report are provided in Supporting documents under CL
DOE Assessment #5	PP has provided the test report for BSF Filters water quality test report dated 16/03/2007 from Central Water Testing Laboratories, Ministry of water and Irrigation Republic of Kenya and for SAM Filters water quality test report from Nairobi City & Sewerage Company Ltd. Dated 31/05/2012 and the sample was tested for both water Raw and Filtered Water total Coliforms has been found and no Fecal (E.coli) coliforms bacteria. Quality of the water treated by the project technology is equal to or better than the quality of the drinking water in the pre-project scenario.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	5		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to substantiate its statement in the table in Section B.2. that currently there are no other Water Filtration Projects undertaken in the target area.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Section B.2. has been amended to reflect that there are no other Bio Sand Water Filtration projects in operation in the target area at the time of submission of the PDD for validation.		



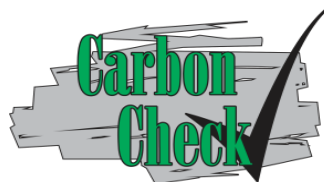
Finding	5
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Please substantiate that no other Bio Sand Water Filtration projects in operation in the target area. CL 5 is open
Corrective Action #2	The statement has been omitted from the PDD because it is impossible to qualify any other water filtration projects unless the same are registered for CDM or GS registration
DOE Assessment #2	PP is required to provide the clarification for the omission of the text in the revised PDD. CL is Open
Corrective Action #3	The PP in the demonstration of additionality has demonstrated other bio Sand Filtration Projects in the country and the target area. At the time of submission of Corrective Action #2 the PP was not aware of these other projects and as such could not comment on them.
DOE Assessment #3	PP has provided the clarification for the omission of the PDD and same has been cross check with provided references and found correct.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	6		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to clarify which are the types of fuel included in the baseline scenario.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Baseline Surveys which have been submitted to the DOE confirm that 97% of fuel used in the baseline scenario is attributable to wood fuel which only 2% and 1% attributable to charcoal and maize cobs respectively.		



Finding	6
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Kindly substantiate the same. CL 6 is open.
Corrective Action #2	Paired sample surveys have been submitted to the DOE to substantiate this claim. A summary sheet of the tabulated results have been submitted to the DOE.
DOE Assessment #2	PP has submitted the excel sheet, however final authorised copy of the baseline survey conducted is required to be submitted to the DOE. CL is open
Corrective Action #3	Please see Annex 3 of the PDD.
DOE Assessment #3	PP has provided a brief description in Annex 3 of the PDD. However final authorised copy of the baseline survey conducted is required to be submitted to the DOE. CL is open
Corrective Action #4	Excel sheets have been provided to support the claims in Annex 3 of the PDD
DOE Assessment #4	PP has provided the calculation sheet used to arrive at the conclusions provided in table in annex 3 (Baseline Information) of the PDD. CL point is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	7		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to demonstrate how determination of the baseline ensures 100% displacement of the baseline technology.		

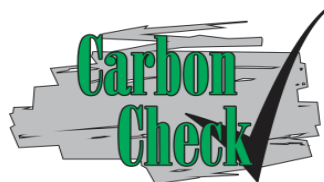


Finding	7
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	As stated in Section B.2. of the eligibility criteria the project technology does not seek to displace the baseline technology but only the baseline practice of boiling water using baseline technology. The baseline technology of traditional fuels shall still be used for other practices such as cooking. Any use of the baseline technology to boil water shall be a monitored parameter and discounted from emissions reductions in line with the baseline and monitoring methodology.
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Justification is acceptable to the validation team. CL 7 is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

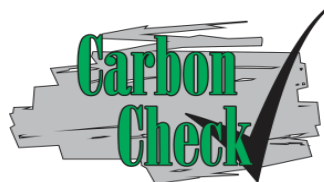
Finding	8		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to demonstrate additionality of the project activity in a convincing and conclusive manner.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Section B.5 of the PDD has been amended pursuant to CL 8.		
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Not correctly demonstrated as per tool for the demonstration and assessment of additionality. <ol style="list-style-type: none"> 1. Step 1-b is not presented in order to explain how steps S2 and S3 are feasible. 2. Step 2 taken in the PDD is not correct as per applied tool. 3. Common practice analysis is not done as per applied tool. 		



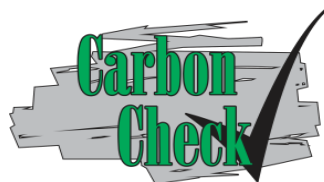
Finding	8
Corrective Action #2	<ol style="list-style-type: none"> 1. Section B.5 has been amended pursuant to CAR 2. The order of steps has been corrected to start with the Investment analysis (step 2) and then the barrier analysis (Step 3). 3. Common practice analysis has been revised.
DOE Assessment #2	<p>Following are the observations under section B.5 in the revised PDD as per the corrective actions taken by the PP:-</p> <ol style="list-style-type: none"> 1. Table showing the donor funding secured by the PP (i.e. ACF) is required to be substantiated by the relevant proof. Moreover, audited balance sheet and annual report of last 3 years, or any publically available data of the ACF is required to be submitted to the DOE. 2. The number of filters to be distributed is not consistent with the description provided under section A.2. However, it is not clear whether the 25,000 filters will be distributed every year or total 25,000 filters will be distributed in 7 years? Please make the sentence clear. 3. Steps numbers mentioned in the PDD under section B.5 is not as per the tool (EB 69, Annex 20), correction is required to be made. 4. Tool to prove the common practice analysis that has been used is required to be mentioned properly. Also, the evidence in support of the statement mentioned under sub-step 4a is required to be provided. 5. PP is required to refer the EB 50, Annex 13, then suitably provide the information along with the supporting evidences for all. All the necessary guidelines related to Investment Barrier mentioned in the EB 50, Annex 13 have not been covered. 6. PP is required to provide following information for the common practice analysis:- <ol style="list-style-type: none"> a. All the steps as per the requirement of EB 69 Annex 8 have not been discussed. b. Reference for all the similar kind of projects identified in step 2 is required to be mentioned. c. Clarification is required whether the different technologies discussed under step 4a have been completely discussed in step 4b in the steps to prove common practice analysis. d. As the proposed project activity involve 2 kinds of filters, whereas only one kind of filter i.e. Bio Sand Filtration. PP is required to clarify why the 2nd kind has not been considered in the demonstration of Common practice. 7. Provide the incorporation certificate of ACF. <p>CL is Open</p>



Finding	8
<p>Corrective Action #3</p>	<ol style="list-style-type: none"> 1. Audited financial statements as well as tax information in public record has been presented to the DOE as supporting evidence. 2. The total number of BSF units to be sold is 23,875 and the number has been made consistent across the PDD and the ER calculation spread sheet. As is shown in the distribution structure in the ER calculation spread sheet, the filters will be sold throughout all 7 years of the crediting period. 3. The PDD has been revised pursuant to the CL. 4. EB 69 Annex 8 has been identified in the PDD. 5. Guidelines 3 – 5 do not have a specific application for investment barriers. As has been stated in the PDD the VER revenue remains the only feasible revenue stream for the PP and to evidence this a signed ERPA has been submitted to the DOE. Kenya is not an LDC and therefore guideline 7 is irrelevant. 6. <ol style="list-style-type: none"> a. There were no observed similar activities and as such steps 4 and 5 have been omitted. b. CL is not clear as to the exact reference file in question. In any case footnote references have been provided. c. Yes. All technologies are consistent in steps 4a and 4 b. d. the SAM and BSF units have been grouped together because they have similar output – namely potable water. 7. ACF’s articles of incorporation have been submitted to the DOE.
<p>DOE Assessment #3</p>	<ol style="list-style-type: none"> 1. PP has submitted the Aqua Clara International’s financial statements years’ ended Dec 31, 2011 and 2010. Moreover, audited balance sheet and annual report of last 3 years, or any publically available data of the ACF is required to be submitted to the DOE. Hence, CL is open 2. PP has provided in the section A.2 of the PDD, the total 23,875 filters will be distributed in 7 years. CL closed. 3. PP has steps numbers mentioned in the PDD under section B.5 is as per the tool (EB 69, Annex 20). CL closed. 4. PP has provided the common practice analysis mentioned properly. However, PP is required to submit the evidence in support of the statement mentioned under sub-step 4a is required to be provided. 5. Needs to be done 6. PP has mentation all the steps as per common practice EB 69 annex 8. Hence, CL point is closed. 7. PP is required to submit the incorporation certificate of ACF. CL is open.



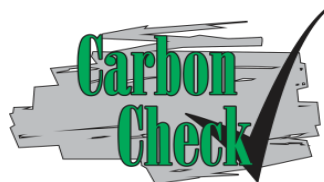
Finding	8
Corrective Action #4	1. The PP has provided audited balance sheets for the last three years (2009 – 2012) 4. Supporting evidences for the statements in the step 4 a have been submitted to the DOE. 5. The VERPA has been submitted but the PP requests confidentiality. 7. The PP has submitted the certificate of incorporation
DOE Assessment #4	1. PP has provided the audited balance sheet and annual report of last 3 years. CL point is closed 4. DOE is not able to find any documents for support of the statement mentioned under sub-step 4a. However, PP is required to provide the evidence. CL Point is not closed 5. VERPA is unable to locate in provided supporting documents folders. PP is required to provide the same and In section B.5 of PDD the PP has only addressed Guideline 1 and 2 of EB 50 Annex 13. But PP needs to provide explanation why guideline 3, 4 and 5 don't have specific application for investment barrier as mentioned in the response here. Moreover the PP needs to also provide explanation on how does it meet guideline 6 and non-applicability of guideline 7 and PP shall refer to the latest version of Tool for demonstration and assessment of Additionality with respect to CL points 3,4,5,6. CL Point is not closed. 7 PP has provided the incorporation certificate of ACF. CL point is closed
Corrective Action #5	The PP has adopted the first of its kind argument for the demonstration of additionality rather than the barrier analysis previously used. This is based on the latest tool for the demonstration of additionality from the CDM EB Version 07.
DOE Assessment #5	In section B.5 of the revised PDD, PP has changed the demonstration of the additionality from barrier analysis and opted for “first of its kind” approach to prove additionality. However, in accordance with requirements of § 5 (a) of Annex 7, EB 69; PP shall explain: <ul style="list-style-type: none"> • How is the technology being used by the project activity titled “Sustainable Deployment Of the Lifestraw ® Family in Rural Kenya given the fact that both the projects provide the same output i.e., safe drinking water Moreover, PP needs to provide documentary evidences to substantiate the FOIK additionality. Hence CL is open.
Corrective Action #6	The PP has revised the FOIK additionality argument pursuant to the DOE assessment.



Finding	8
DOE Assessment #6	In section B.5 of the revised PDD, PP has opted for First Of Its Kind approach to prove the additionality of the proposed project activity. With regards to the same PP shall: <ol style="list-style-type: none"> 1. Explain in clear and transparent terms the salient difference between various water purification technologies discussed therein especially with respect to other Bio Sand Filtration technology (Hydrad) that have been implemented in the same geographical region (Kenya) before the project design document (CDM-PDD) for the proposed project activity was published for global stakeholder consultation and before the start date of the proposed project activity. 2. Provide documentary evidences to substantiate the arguments put forth.
Corrective Action #7	PP has provided the requested clarifications and supporting evidences.
DOE Assessment #7	The PP has revised the section B.5 of the PDD and explained clearly and transparently the salient differences between various water purification technologies discussed therein. PP has also provided evidences to substantiate that the Hydrad Project, which uses the same Bio Sand Filtration technology started after the start of the project activity i.e., distribution of water filters for Hydrad project started after ACF started distributing its water filters. ACF started distributing its water filter in year 2009 i.e., 26/06/2009 and the Hydrad project started distributing its filters in 2012 ⁶ . Hence it can be concluded that the project activity is First of Its Kind in the applicable geographical area i.e., Republic of Kenya and hence it is additional.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

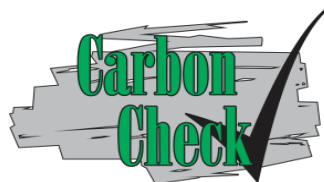
Finding	9		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	It has not been demonstrated how project emissions attributable to the introduction of the SAM-filters have been taken into account during application of the methodology.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	There are no project emissions associated with the SAM units and the same has been clarified in the PDD.		

⁶ <http://www.nativeenergy.com/461>



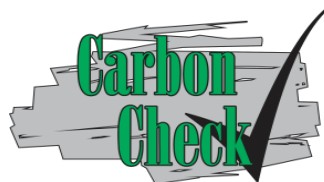
Finding	9
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	As per table presented in section B.3 of the revised MR, PP shows that CO ₂ , CH ₄ and N ₂ O are the important sources of emissions in project case. Please clarify. CL 9 is open.
Corrective Action #2	Table 6 of the PDD has been amended to reflect that there are no attributable emissions sources from any of the identified GHG.
DOE Assessment #2	The table 6 in the revised PDD has been corrected now, and found acceptable as CO ₂ , CH ₄ and N ₂ O are not included as per the proposed project scenario. CL is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	10		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Discussion of parameter c), as per the applied methodology as a possible source of leakage emissions, is not consistent with the description of the project activity in Section A.2. of the PDD; Section A.2 states to envisage the project activity to result in an introduction of 16,976 BSF filters, whereas in the discussion of possible sources of leakage emissions (Section B.6.3. on Leakage) it is mentioned to envisage the introduction of 25,000 BSF filters during the first crediting period. Project participant is requested to clarify these figures.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The correct figure and that which appears in all design documentation is 23,875BSF filters.		
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Validation team checked the revised PDD and found that the no. of BSF filters is corrected throughout but this no. has not been substantiated by the project proponent. CL 10 is open.		



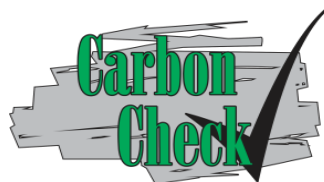
Finding	10
Corrective Action #2	A distribution schedule has been included in the emissions reductions spreadsheet.
DOE Assessment #2	Still in the revised PDD, inconsistency in the figures of the filters has been found(check section B.5). PP is required to recheck the revised PDD throughout and maintain the consistency. However, evidence of the schedule of both the types of filter sale throughout the crediting period is required to be submitted to the DOE. CL is open
Corrective Action #3	The numbers given to the DOE are projections and are not supported by any verifiable evidences. The data presented in the PDD is now consistent at 23,875 BSF filters. The numbers in the distribution schedule are projections and cannot as such be based off any actual evidences.
DOE Assessment #3	In revised PDD has been found consistency. However, evidence/ declaration of the schedule of both the types of filter sale throughout the crediting period is required to be submitted to the DOE. CL is open
Corrective Action #3	A distribution sheet from the PP has been submitted to the DOE as an attestation to this claim.
DOE Assessment #4	PP has provided the declaration letter for distribution of filter of the schedule of both the types of filter sale throughout the crediting period.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	11
Classification	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to submit supporting evidence that project surveys took place in order to determine end user characteristics (e.g. quantity of water consumed etc.).
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Baseline surveys have been submitted to the DOE.



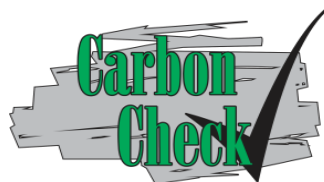
Finding	11
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Baseline survey report is not submitted to the validation team.
Corrective Action #2	Paired sample surveys have been provided to the DOE.
DOE Assessment #2	PP is required to submit the final approved baseline survey report to the DOE. PP has submitted the excel sheet, which does not make it evident the approach and final conclusion of the baseline survey. CL is open
Corrective Action #3	Annex 3 has been further revised to substantiate the baseline approach used.
DOE Assessment #3	In annex 3 of the PDD has been provided the approach of the sample survey. However, PP is required to submit the final approved baseline survey report to the DOE. CL is open
Corrective Action #4	Supporting excel worksheets have been provided to support the claims in Annex 3.
DOE Assessment #4	PP has provided the calculation sheet used to arrive at the conclusions provided in table in annex 3 (Baseline Information) of the PDD.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	12		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to clearly indicate that the most conservative values have been used as input parameters for the calculation of emission reductions, taking into account future trends that may affect the GHG balance.		

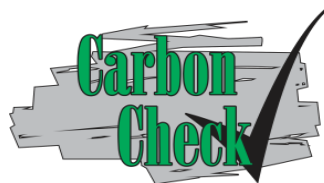


Finding	12
<p>Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i></p>	<p>The following conservative values have been used in the calculation of the emissions reductions:</p> <ol style="list-style-type: none"> 1. The CO₂, CH₄ and N₂O emissions factors from the combustion of wood fuel have been derived from IPCC default values. 2. The Global Warming Potentials used have been revised to the conservative 100 year horizon rather than the 20 year horizon previously used⁷. 3. The values for water consumption have been derived from paired sample surveys which were used to quantify baseline characteristics as well as project scenario water consumption. 4. To be conservative in the ex-ante estimation of GHG emissions reductions a usage rate has been used from the pilot studies conducted by the PP.
<p>DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<ol style="list-style-type: none"> 1. Validation team checked the revised PDD and found that CO₂, CH₄ and N₂O emission factor of wood fuel is not correct as per IPCC 2006 guidelines. 2. GWP of CH₄ and N₂O is found correct as per UNFCCC default values. 3. Sample survey report is not submitted to the validation team. 4. Which usage rate? Not clear. <p>CL 12 is open.</p>
<p>Corrective Action #2</p>	<ol style="list-style-type: none"> 1. The CH₄, N₂O and CO₂ values are derived from the IPCC guidelines. 2. The values used are the UNFCCC defaults for a 20 year horizon a footnote reference has been included from the UNFCCC 3. A paired sample has been submitted to the DOE 4. The usage rate has been used to estimate the emissions reductions in line with Equation 6. This value is an estimate derived from surveys conducted in the pilot stage of the project activity. However, the PP shall conduct monitoring surveys prior to verification which shall be used to quantify the usage rate.

⁷http://unfccc.int/ghg_data/items/3825.php

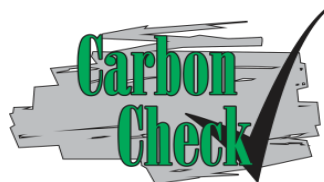


Finding	12
<p>DOE Assessment #2</p>	<ol style="list-style-type: none"> 1. PP is required to recheck the applied values of CO₂, CH₄ and N₂O emission factor of wood fuel in the revised PDD and spread sheet as the values applied is not found to be correct as per the IPCC guidelines. Also unit of each parameter is required to be mentioned. CL point is open 2. In the revised PDD it has been found that GWP of the GHGs has been selected for the time horizon of 100 years. PP is required to clarify how this is the most conservative one to be selected and its applicability for the proposed project activity. CL point is Open 3. PP is required to submit the final approved baseline survey report. Moreover, PP is required to clarify whether the data source mentioned in the revised PDD under section B.6.3. as baseline study and baseline survey, both are different? CL point is Open 4. From the description provided under section B.7.1 for usage rate, its applicability is not clear. PP is required to elaborate it more transparently. CL Point is open 5. PP is required to clarify whether any Drop Off rate is there for the proposed project activity. CL point is open 6. PP is required to clarify how the value selected for fNRB is the most conservative one. CL point is Open 7. PP is required to submit the approved water boiling test report for the proposed project activity to the DOE. CL point is Open 8. PP is required to recheck the values mentioned under the revised spread sheet and make it consistent with the CARs/CLs raised for the same. Moreover unit for each applicable values are required to be mentioned. However, linking to the values in the spread sheet must be made traceable. CL point is Open 9. Under section C.1.2. of the PDD, PP has mentioned the operational life of the proposed project activity as 7 years. The evidence for the same is required to be submitted to the DOE in line with the EB 50, Annex 15. CL point is Open



Finding	12
Corrective Action #3	<ol style="list-style-type: none"> 1. Values are derived from the IPCC guidelines Table 2.5. these are default conservative estimates for residential consumption⁸. 2. The 100 year horizon offers more conservative estimates than the 20 year horizon. Also this is the option preferred by the GS as per http://www.cdmgoldstandard.org/wp-content/uploads/2011/09/Global-Warming-Potentials-for-Gold-Standard-Project-Activities-2013.pdf 3. Please refer to Annex 3 of the PDD. Reference in Section B.6.3 has been revised to reflect the baseline survey rather than the study. 4. A description of the use of the usage rate has been provided in section B.7.1. 5. The drop off rate has been included in the usage rate. 6. A default value for the parameter fNRB has been used instead of the value previously used. 7. Please see Annex 3 of the PDD. 8. All values in the ER calculations sheet as well as the PD are now consistent and linked. 9. Supporting documentation has been provided
DOE Assessment #3	<ol style="list-style-type: none"> 1. PP has corrected the applied values of CO₂, CH₄ and N₂O emission factor of wood fuel in the revised PDD, and same has been cross-check with IPCC guidelines. CL point is closed. 2. PP is required to clarify how this is the most conservative one to be selected and its applicability for the proposed project activity. CL point is Open. 3. PP has revised in section B.6.3 and Annex 3 of the PDD. However, PP is required to submit the final approved baseline survey report. CL point is Open. 4. PP has provided description under section B.7.1 for usage rate. CL point is closed. 5. Drop Off rate is uses in usage rate. CL is closed. 6. PP has applied the default value of parameter fNRB. CL point is closed. 7. PP is required to submit the approved water boiling test report for the proposed project activity to the DOE. CL point is Open 8. PP is required the answer those question, which is raised by DOE in ER sheet. CL point is Open 9. PP is required to submit the evidence of operational life of the project activity. CL point is Open.

⁸http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_2_Ch2_Stationary_Combustion.pdf

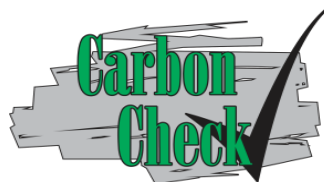


Finding	12
Corrective Action #4	2. The PP has revised the GWP estimates to reflect the latest guidance from the Gold Standard. 3. Please see Annex 3. Supporting excel work sheets have been provided as well. 7. The PP has submitted excel sheets of the Water boiling Test results 8. The PP has addressed all the ER worksheet questions 9. The PP has provided supporting material on the operational lifetime of the BSF units at beyond 30 years with the only requirement being a replacement of the plastic units.
DOE Assessment #4	2. PP has provided justification about GWP and taken values from Climate Change 2007: Working Group I: The Physical Science Basis, 2.10.2., and same has been check with IPCC website and provided footnote in PDD. However, PP shall use IPCC 2006 report for using default value for GWP of GHGs. CL point is not closed 3. PP has provided the calculation sheet used to arrive at the conclusions provided in table in annex 3 (Baseline Information) of the PDD. CL is closed. 7 PP has submitted the excel sheets of the Water boiling Test results. However, PP is required to submit the approved water boiling test report for the proposed project activity to the DOE. CL point is Open 8 Some of the comment is still open in provided excel sheet. PP shall reply to the outstanding issues. CL point is Open 9 DOE is not able to find out the provided documents. However, PP is required to provide the same. CL point is Open
Corrective Action #5	2.The PP has updated the GWP Values 7. The PP has described the water boiling test procedure and a summary of the same in Annex 3 of the PDD. 8. The ER calculation sheet comments have been revised as requested 9. The PP has provided supporting documents to justify the project lifespan
DOE Assessment #5	2. PP has updated the GWP values in the PDD. Point is closed. 7. PP in Annex 3 of the revised PDD has described the survey approach used to substantiate target population characteristics, baseline technology use, fuel consumption, leakage, and sustainable development indicators. PP has used paired sample survey approach to quantify baseline characteristics as well as project scenario water consumption. Moreover PP has provided the water boiling test calculation excel sheet and duly filled (signed) questionnaires that were used to gather data for the tests. 8. PP has provided response, which is raised by DOE in ER sheet. Point is closed. 9. PP has provided the documents for lifespan for these technologies. Point is closed.



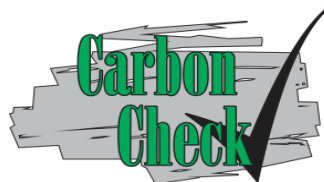
Finding	12
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	13
Classification	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to clearly indicate the start of the crediting period in relation to estimated emission reductions in the first year and to make tables in Sections A.4.4. and B.6.4. of the PDD consistent in relation to the latter.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The PDD has been revised pursuant to the CL.
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	PP has revised the section A.4.4 and B.6.4 of the PDD and same has been found correct. However, PP shall Refer to closure of CL 3.
Corrective Action #2	The start date of the crediting period has been revised and justified in the PDD as requested.
DOE Assessment #2	<p>The start date of the crediting period has been revised to 20/09/2011 in the revised PDD. This has been selected as the project activity is a retroactive one and seeks retroactive credits.</p> <p>Pending closure of point 3 of CAR 10.</p> <p>Hence CL is not closed.</p>
Corrective Action #3	The start date has been revised from 20/09/2011 to 15/11/2011



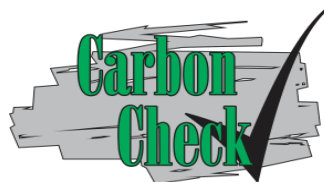
Finding	13
DOE Assessment #3	PP has revised the starting date of the project activity as 26/06/2009 (the date when first filter under the project was distributed). And was validated through review of sales / distribution records of the water filters. The same is found to be in line with the guidance provided under paragraph 67 of EB 41 meeting report. Moreover the start date of the crediting period has been revised to 16/12/2011 i.e., 2 years prior to the expected date of registration as the project is seeking retroactive credits. The same is in line with requirements of GS Toolkit. Furthermore the PP has submitted the clarification mail from GS to substantiate the same.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	14		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to include as a parameter the project water quality of water treated by SAM Filter technology.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The quality of treated water is indicated as monitored parameter and this shall apply to both the SAM units as well as the BSF units.		
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Parameters are still not specifically and transparently mentioned both for BSF and SAM units. CL 14 is open.		
Corrective Action #2	SAM units will also be subject to the same water quality tests as the BSF units.		
DOE Assessment #2	PP is required to submit the water quality test report for each type of filters. CL is open		
Corrective Action #3	Both Water quality Test Reports have been submitted to the DOE.		
DOE Assessment #3	PP has provided the water quality test report for both types of filters.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed		



Finding	15		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to describe in a transparent manner what the QC/QA-procedures entail and which parameters are subject to these procedures. The project participant is requested to submit these procedures to the DOE for validation.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	QA and QC procedures have been included in the monitoring plan.		
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	QA/QC procedures are found mentioned correctly under section B.7.2 of the revised PDD. CL 15 is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed		

Finding	16		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to describe in a clear manner, the roles and responsibilities regarding the monitoring and project management, including procedures on training of monitoring personnel.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The PDD has been amended to reflect the clarification requested in CL 17.		
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Some of the required details like Operational and management structure etc. are still missing as per PDD filling guidelines under specific heads. CL 16 is open.		



Finding	16
Corrective Action #2	A definition of the roles and responsibilities for personnel in monitoring positions has been availed to in the PDD on page 69. An operational and management structure is typically only required for the PoA and therefore this CL is not quite clear.
DOE Assessment #2	<p>Following are the observations under section B.7. of the revised PDD:</p> <ol style="list-style-type: none"> 1. Operation and Management structure for monitoring is not specific to the Project Activity. PP shall provide the well-defined O&M structure under section B.7.2. of the PDD, for the proposed project activity transparently. CL point is Open 2. How WCFT will be conducted is required to be substantiated in the monitoring plan under section B.7.2. CL point is Open 3. Clarification is required to be provided for the avoidance of leakage assessment under the monitoring plan. CL point is open. 4. PP is required to clarify whether any guideline and standard for sampling process is followed for the proposed project activity? CL point is Open
Corrective Action #3	<ol style="list-style-type: none"> 1. Roles and Responsibilities have been included in Section B.7.2 of the PDD. 2. Section B.7.2 of the PDD has been revised pursuant to the CL. 3. Section B.7.2 of the PDD has been revised pursuant to the CL. 4. the guidance used for monitoring this PDD has been based off the GS methodology Thermal Practices and Technologies to Displace Decentralized Thermal Energy Consumption.
DOE Assessment #3	<ol style="list-style-type: none"> 1. PP shall provide the well-defined O&M structure under section B.7.2. CL point is Open 2. PP has conducted is required to be substantiated in the monitoring plan under section B.7.2. CL point is closed. 3. PP has demonstrated about leakage assessment under the monitoring plan. CL point is closed 4. PP has clarify that the guideline and standard for sampling process is followed for the proposed project activity. CL point is closed
Corrective Action #4	The PP has added an O & M structure in section B.7.2 of the PDD.
DOE Assessment #4	PP has provided the Operation and Management structure and Roles and Responsibilities for monitoring structure in section B.7.2 of the PDD.



Finding	16
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	17		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The project participant is requested to clarify whether or not comments have received via email or other media and if so whether they have been taken into account and in which manner.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The PP has not received any feedback from stakeholders via email or other media. The only feedback received was solicited at the LSC which has been fully documented in the PDD and the LSC report.		
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	PDD contains complete description on how local stakeholders comments were taken into account, moreover section E.1 lacks to explain the mode of invitation, date of local stakeholders meeting, how these stakeholders were invited etc. please provide complete information as per PDD filling guidelines. CL 17 is open.		
Corrective Action #2	Section E.1 has been amended pursuant to the CAR.		
DOE Assessment #2	PP has provided the relevant information under section E.1 of the revised PDD. CL is Closed		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed		

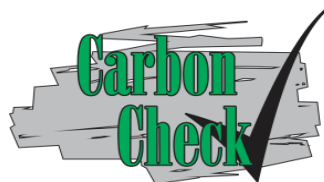


Table-3: Forward Action Request (compliance of § 27 of VVS)

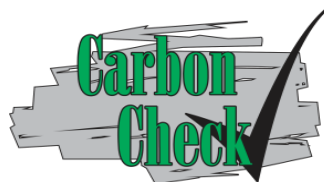
Finding	1		
Classification	<input type="checkbox"/> CAR	<input type="checkbox"/> CL	<input checked="" type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	During first verification the verifying DOE shall verify and confirm VER transfer (waiver of carbon rights by end users of the technology) involving indirect communication mechanism i.e., through county representatives and village chiefs, The verifying DOE shall also verify how the end users of the technology were informed about waiving off their carbon rights by county representatives and village chiefs.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>			
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input type="checkbox"/> The finding is closed		

Finding	2		
Classification	<input type="checkbox"/> CAR	<input type="checkbox"/> CL	<input checked="" type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The verifying DOE shall assess and confirm that the monitoring of SD indicators for the retroactive crediting period has been done in accordance with sustainability monitoring plan stated in section G of the Gold Standard Passport.		



Finding	2
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input type="checkbox"/> The finding is closed

Finding	3		
Classification	<input type="checkbox"/> CAR	<input type="checkbox"/> CL	<input checked="" type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The verifying DOE shall assess and confirm that the usage surveys and monitoring surveys submitted while requesting 1 st issuance of emission reductions and also confirm that the same has been mentioned as deviation from the monitoring plan in the monitoring report.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>			
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input type="checkbox"/> The finding is closed		

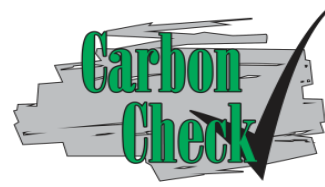


Finding	4		
Classification	<input type="checkbox"/> CAR	<input type="checkbox"/> CL	<input checked="" type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The PP shall meet the guidelines for water quality tests (to be released soon by GS) for issuance (FAR 1 raised by GS during 6-week registration review period)		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>			
DOE Assessment #1 <i>(validators)</i> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input type="checkbox"/> The finding is closed		



APPENDIX B

Certificates of Competence



Carbon Check (Pty) Ltd

Amit Anand

is hereby certified as a qualified

Assessor
Lead Assessor
Technical Reviewer
Technical Expert for Technical Area
1.2; 13.1

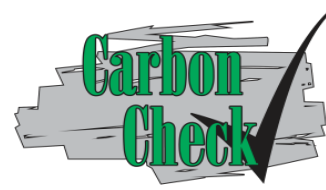
with Carbon Check (Pty) Ltd, under the regulations of the UNFCCC and Carbon Check's qualification criteria .

Approval date: 07 February 2013

Technical Executive
Mr Vikash Kumar Singh

Executive Director
Mr Priyesh Ramlall

The above competence is valid for one year from the date of approval and is subject to review as per changes in CCL and UNFCCC requirements and procedures.



Carbon Check (Pty) Ltd

Barun Kumar

is hereby certified as a qualified

Assessor
Technical Expert

In the following Technical Areas

1.2; 13.1

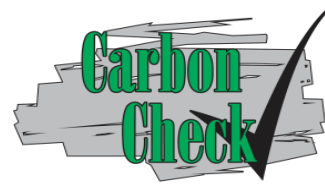
with Carbon Check (Pty) Ltd, under the regulations of the UNFCCC and Carbon Check's qualification criteria .

Approval date: 19 JULY 2013

Technical Executive
Mr Vikash Kumar Singh

Executive Director
Mr Priyesh Ramlall

The above competence is valid for one year from the date of approval and is subject to review as per changes in CCL and UNFCCC requirements and procedures.



Carbon Check (Pty) Ltd

Pankaj Kumar

is hereby certified as a qualified

Assessor
Lead Assessor
Technical Expert
Technical Reviewer

In the following Technical Areas

1.1; 1.2; 3.1; 4.5; 13.1

with Carbon Check (Pty) Ltd, under the regulations of the UNFCCC and Carbon Check's qualification criteria .

Approval date: 07 March 2013

Technical Executive
Mr Vikash Kumar Singh

Executive Director
Mr Priyesh Ramlall

The above competence is valid for one year from the date of approval and is subject to review as per changes in CCL and UNFCCC requirements and procedures.



Carbon Check (Pty) Ltd

Stephanie Crichton

is hereby certified as a qualified

Assessor
Technical Expert

In the following Technical Areas
1.2; 13.2

with Carbon Check (Pty) Ltd, under the regulations of the
UNFCCC and Carbon Check's qualification criteria .

Approval date: 29 May 2013

Technical Executive
Mr Vikash Kumar Singh

Executive Director
Mr Priyesh Ramlall

The above competence is valid for one year from the date of approval and is
subject to review as per changes in CCL and UNFCCC requirements and
procedures.



Ravi Shankar

is hereby certified as a

Qualified CDM Technical Expert

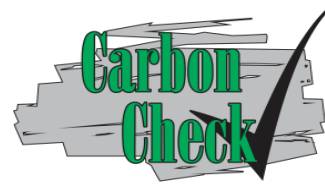
with Carbon Check (Pty) Ltd, under the regulations of the
UNFCCC and Carbon Check's qualification criteria, in the following
Technical Area/s:

1.2, 2.1, 2.2, 3.1 & 13.1

Awarded: 12 May 2011

Chief Executive Officer
Mr Adam Simcock

Chief Compliance Officer
Mr Priyesh Ramlall



Carbon Check (Pty) Ltd

Ramchandra Nesari

is hereby certified as a qualified

Assessor
Technical Expert

In the following Technical Areas

1.1; #4n; 5.1

with Carbon Check (Pty) Ltd, under the regulations of the UNFCCC and Carbon Check's qualification criteria .

Approval date: 21 May 2013

Technical Executive
Mr Vikash Kumar Singh

Executive Director
Mr Priyesh Ramlall

Fuel Switch measure in Industrial Facility an Waste Recovery projects

The above competence is valid for one year from the date of approval and is subject to review as per changes in CCL and UNFCCC requirements and procedures.



Adam Simcock

is hereby certified as a

Local Expert

With Carbon Check (Pty) Ltd under the regulations of the UNFCCC and
Carbon Checks qualification criteria for the following countries:
South Africa, Kenya, Mozambique, Ghana, Malawi, Ghana, Namibia,
Zambia, Madagascar

Awarded: April 2013

Priyesh Ramlall
Carbon Check