



VALIDATION REPORT GENERAL CARBON ADVISORY SERVICES PVT. LTD.

VALIDATION OF THE Water Purifiers Programme in India

REPORT NO. INDIA-VAL/509.49/2012
REVISION NO. 1

BUREAU VERITAS CERTIFICATION

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VALIDATION REPORT

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Client: General Carbon Advisory Services Pvt Ltd	Client ref.: Ms. Betsy Vincent


Summary:

Bureau Veritas Certification has made the validation of the "Water purifiers programme in India" located in India on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.

The validation scope is defined as an independent and objective review of the PoA-DD, the baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the PoA design and the baseline and monitoring plan; ii) follow-up interviews with stakeholders; iii) resolution of outstanding issues and the issuance of the final validation report and opinion. The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the validation process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix A. Taking into account this output, the Coordinating/Managing Entity revised its PoA design documents.

In summary, it is Bureau Veritas Certification's opinion that the PoA correctly applies the baseline and monitoring methodology AMS III A V, version 2 and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria.

Report No.: INDIA-val/509.49/2012	Subject Group: CDM	
Project title: Water Purifiers Programme in India		
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Internal Technical Review carried out by:  Sanjay Patankar H B Muralidhar – Support ITR		
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Flavio Gomes



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1 INTRODUCTION

General Carbon Advisory Services Pvt. Ltd; has commissioned Bureau Veritas Certification to validate its CDM project Water Purifiers programme in India (hereafter called "the PoA"). The first real case CPA would be implemented in village Lahe, Raas and Doryachapada of Shahapur taluk of Thane district, Maharashtra State, India.

This report summarizes the findings of the validation of the project, performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

1.1 Objective

The validation serves as programme design verification and is a requirement of all programme project activities. The validation is an independent third party assessment of the programme design. In particular, the PoA's baseline, the monitoring plan (MP), and the programme compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the programme design, as documented, is sound and reasonable, and meets the stated requirements and identified criteria. Validation is a requirement for all CDM programme and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reductions (CERs).

UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.

1.2 Scope

The validation scope is defined as an independent and objective review of the programme design documents, the baseline study and monitoring plan and other relevant documents at POA level. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations.

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

1.3 Validation team

The validation team consists of the following personnel:

FUNCTION	NAME	TA 3.1	TA X.X	TASK PERFORMED*
Team Leader	Hitesh Karandikar	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> DR <input checked="" type="checkbox"/> SV <input type="checkbox"/> RI



Team Member	Vishwanath Sule	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> DR <input checked="" type="checkbox"/> SV <input type="checkbox"/> RI
Technical Specialist	N.A.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI
Financial Specialist	N.A.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI
Internal Technical Reviewer (ITR)	Sanjay Patankar	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI
supporting ITR	H B Muralidhar	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI

*DR = Document Review; SV = Site Visit; RI = Report issuance

2 METHODOLOGY

The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In order to ensure transparency, a validation protocol was customized for the programme, according to the Clean Development Mechanism Validation and Verification Standard (version 2) (Ref /B1/), Clean Development Mechanism Project Standard (version 01.0) (Ref /B2/), issued by the Executive Board at its 65th meeting on 25/11/2011. The protocol shows, in a 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 CDM project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The completed validation protocol is enclosed in Appendix A to this report.

2.1 Review of Documents

The PoA-DD submitted by General Carbon Advisory Services Pvt. Ltd; and additional background documents related to the project design and baseline, i.e. country Law, PoA-DD form, Approved methodology, Kyoto Protocol, Clarifications on Validation Requirements to be Checked by a Designated Operational Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, General Carbon Advisory Services Pvt. Ltd; revised the PoA-DD (Ref /3/) and resubmitted it in December 2012.

The validation conclusions presented in this report relate to the project as described in the PoA-DD version 04 (Ref /3/).



2.2 Follow-up Interviews

On 18/07/2012-19/07/2012 Bureau Veritas Certification performed interviews with stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of General Carbon Advisory Services Pvt. Ltd; were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
General Carbon Advisory Services Pvt. Ltd. (Project Participant)	<ul style="list-style-type: none"> ➤ Chronological description of the programme activity along-with key steps of the implementation. ➤ Current status of programme design ➤ Technical details of the programme realization, ➤ programme feasibility, designing, operational life time, monitoring of the programme ➤ Host Country Approval ➤ Monitoring and measurement equipment and System (including monitoring of CPAs) ➤ Financial aspects (Additionality) ➤ Programme activity starting date ➤ Start date of CPA ➤ CER allocation / ownership ➤ Baseline study assumptions ➤ Sustainable development issues, Analysis of local stake holder consultation ➤ Roles & responsibilities of the project participants with respect to programme management, monitoring and reporting ➤ National Legislation
LOCAL Stakeholder	<ul style="list-style-type: none"> ➤ Views and concerns about the Project Activity ➤ Confirmation of the local stakeholder meeting conducted by General Carbon Advisory Services Pvt. Ltd.
General Carbon Advisory Services Pvt. Ltd. (CME- also the first real case CPA Implementer)	<ul style="list-style-type: none"> ➤ Methodology application ➤ Baseline determination & emission factor ➤ Additionality ➤ Monitoring Plan ➤ GHG Calculations ➤ Supporting data, evidences and documentation ➤ Resolution of CAR's and CL's



2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the programme design.

Corrective Action Requests (CAR) is issued, where:

- (a) The CME/project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
- (b) The applicable CDM requirements have not been met;
- (c) There is a risk that emission reductions cannot be monitored or calculated.

The validation team may also use the term Clarification Request (CL), if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

The validation team may also raise a forward action request (FAR) during validation to identify issues related to programme implementation that require review during the first verification of the CPA under the PoA.

To guarantee the transparency of the verification process, the concerns raised are documented in more detail in the verification protocol in Appendix A.

2.4 Internal Technical Review

The validation report underwent an Internal Technical Review (ITR) before requesting registration of the programme.

The ITR is an independent process performed to examine thoroughly that the process of validation has been carried out in conformance with the requirements of the validation scheme as well as internal Bureau Veritas Certification procedures.

The Team Leader provides a copy of the validation report to the reviewer, including any necessary validation documentation. The reviewer reviews the submitted documentation for conformance with the validation scheme. This will be a comprehensive review of all documentation generated during the validation process.

When performing an Internal Technical Review, the reviewer ensures that:

The validation activity has been performed by the team by exercising utmost diligence and complete adherence to the CDM rules and requirements.

The review encompasses all aspects related to the project which includes PoA design, baseline, additionality, monitoring plan and emission reduction calculations, internal quality assurance systems of the CME as



well as the PoA, review of the stakeholder comments and responses, closure of CARs, CLs and FARs during the validation exercise, review of sample documents.

The reviewer compiles clarification questions for the Team Leader and Validation Team and discusses these matters with Team Leader.

After the agreement of the responses on the 'Clarification Request' from the Team Leader as well as the PP(s) the finalized validation report is accepted for further processing such as uploading on the UNFCCC webpage.

3 VALIDATION CONCLUSIONS

In the following sections, the conclusions of the validation are stated.

The findings from the desk review of the original programme design documents and the findings from interviews during the follow up visit are described in the Validation Protocol in Appendix A.

The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Validation Protocol in Appendix A. FARs (Forward Action Requests) are stated, where applicable. The validation of the Project resulted in 65 Corrective Action Requests (CARs) and 00 Clarification Requests (CLs) and 1 FAR. The CARs and CLs were closed based on adequate responses from the Project Participant(s) which meet the applicable requirements. They have been reassessed before their formal acceptance and closure. The number between brackets at the end of each section correspond to the VVS paragraph.

3.1 Approval (43-44)

A letter of approval has been received (Ref /5/) for the proposed PoA by the validation team. The same is issued by the Ministry of Environment and Forests (DNA of India) vide its letter reference no. 4/15/2012-CCC dated 22/11/2012.

Bureau Veritas Certification received this letter from M/s. General Carbon Advisory Services Pvt. Ltd; (the CME) and does not doubt its authenticity. The title "Water Purifiers Programme in India" by M/s. General Carbon Advisory Services Pvt. Ltd. (Coordinating/Managing Entity - CME) and contents of the letter of approval refer to the precise proposed CDM programme activity title in the PoA-DD being submitted for registration. The validation team confirms that the letter of approval by the DNA of the host Party confirms the contribution of the proposed CDM project activity to the sustainable development of the host Party. The participation has been authorized by a Party to the Kyoto Protocol.

CAR-43 was raised as the CME did not provide the Host Country Approval to the validation team.



3.2 Authorization (49)

The participation for each project participant has been approved by a Party of the Kyoto Protocol and the CME obtained letters of authorization of its coordination of the PoA from each host party.

The validation team concluded this by reviewing the letter issued by the Ministry of Environment and Forests (DNA of India) vide its letter reference no. 4/15/2012-CCC dated 22/11/2012.

India is the only party involved in the project activity. The participation of the project participant in the proposed CDM project activity has been approved by the DNA of Host Country, India who is also a party to the Kyoto Protocol. The host party of the project has ratified the Kyoto protocol on 26 August 2002. The validation team confirmed the same from UNFCCC website <http://maindb.unfccc.int/public/country.pl?country=IN>.

The participation of project participant approved by a Party of the Kyoto Protocol is concluded by the validation team by reviewing the original Host Country Approval (HCA) (Ref /5/)

3.3 Contribution to sustainable development (52)

The host Party's DNA confirmed the contribution of the project to the sustainable development of the host Party in a letter of approval.

3.4 Modalities of Communications (58, 61)

The validation team has performed due diligence on the Modalities of Communications (MoC) statement (Ref /6/) in accordance with the requirements established in the VVS and confirms that the MoC statement complies with all relevant forms and requirements.

The validation team has in accordance with the paragraph 53 (a) i.e. by directly checking evidence for corporate, personal identity, specimen signature, employment status and other relevant documentation has concluded that the MoC is signed by the authorized person of the CME, and annex 1 signatories are sole focal point entities for the PoA at this stage. The Validation team also confirms that the number of focal points are not exceeding 5 as PoA is implemented in India only. The validation team confirms that the MoC (Ref /6/) form is signed by the project participant's authorized signatories signing the F-CDM-MOC correspond to the project participant's authorized signatories included in F-CDM-MOC, annex 1. The signing person's authority has been approved by the Director of the CME. The same person has signed the contract with the DOE.

CAR 65 was raised as the CME did not provide the MoC to the validation team. The same was closed once CME submitted this to validation team.



In accordance with the VVS 1.2, para 61, the DOE confirms that:

- (a) The latest version of the form .Modalities of Communication statement. (F-CDM-MOC) has been used;
- (b) The information required as per the F-CDM-MOC, including its annex 1, is correctly completed;
- (c) The project participant' authorized signatories signing the F-CDM-MOC correspond to the project participant's authorized signatories included in F-CDM-MOC, annex 1.

3.5 Project design document (63)

The validation team hereby confirms that the PoA-DD complies with the latest PoA-DD form.

3.6 Changes in the Programme of Activity (17)

During the site visit following changes were observed in project as compared to details mentioned in webhosted PoA -DD:

The final POA-DD, Version 4 has the following changes with respect to webhosted PoA-DD (Ref /1/).

1. Description of the policy/measure, framework of PoA and clarity on inclusion of CPA, Voluntary participation, Explanation on how PoA will reduce GHG emissions or increase GHG removals, sustainable development due to proposed Programme of Activity is now transparently described as a result of CAR-1 to CAR-5.
2. Demonstration of the additionality of CPA, the additionality for the combinations of technology measure and methodology in Section B.2, local stakeholder consultation conditions, the eligibility criteria for SSC-PoA-DD, identification of target group, de-bundling criteria are now clearly described as a result of CAR-15 to CAR-20.
3. The technology measures were not referenced correctly in Section B.3 in accordance with the Guidelines for completing the programme design document form for small-scale CDM programme of activities (version 02.0), the same were corrected as a result of CAR 20.



4. Sampling criteria were correctly defined in accordance with EB 55, Annex 38 and EB 67, Annex 06 as a result of CAR-21, and CAR-64
5. Applicability of methodology (ies) for each CPA and technology measures implemented by the CPA were correctly described as a result of CAR-24.
6. Records of arrangements for training and capacity development for personnel, procedures for technical review of inclusion of CPAs, procedure to avoid double counting, records and documentation control process for each CPA under the PoA, measures for continuous improvements of the PoA management system are transparently described as a result of CAR-31 to CAR-35.
7. Calculations for leakage emissions, correction equation, the data parameters to be monitored during the crediting period were transparently described as a result of CAR-57 to CAR-59.

3.7 PoA description (69)

The process undertaken to validate the accuracy and completeness of the PoA description is as follows:

Prior to the implementation of project activity the common practise is to use fossil fuel or non renewable biomass to boil water as a means of purification of water for drinking purposes

The proposed PoA aims at improving the quality of drinking water through dissemination of low greenhouse gas emitting water purification systems to households and communities of rural populations of India. The programme activity aims to provide drinking water as per drinking water standards specified by the Government of India.

The programme will avoid the use of non renewable biomass or fossil fuel utilized in the pre project scenario which otherwise would have been utilised for boiling of water as a means of purification to achieve safe drinking water. This results in the reduction of emissions into the atmosphere.

Due to this programme of activity (PoA), the drinking water or potable water is safe enough to be consumed by humans or can be used with low risk of immediate / long term harm. The output of the equipment(s) in the programme i.e. potable water; satisfies the requirements of different parameters as prescribed in Indian National Standard, IS – 10500: 2012 “Drinking Water – Specification – Second Revision, May 2012 (ref/7/). This is in line with the methodology AMS III AV version 02 (Ref /B3/) applicability conditions described in detail in this report later.

The validation team observed that M/s. General Carbon Advisory Services Pvt Ltd.; the CME of the programme is a consulting firm delivering various

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energy & environmental commodities such as GHG ER project development, GHG ER transaction services, climate strategy for multi – sectoral, multi- national business entities, RECs and RPOs, power trading, green energy/power sourcing, PAT mechanism and ECerts, Corporate Social Responsibility and Sustainability. This is confirmed from the “Registration Certificate of Establishment” issued by the Office of the Inspector, Bombay Shops and Establishment Act, 1948 vide certificate no. 760115109/COMMERCIAL II, Ward A, dated 7/11/2009 (Ref /8/), which states nature of business of the PP as “Consultancy Services.”. Also, the same was confirmed from the “Certificate of Incorporation” issued by the Assistant Registrar of Companies, Maharashtra, in the name of General Carbon Advisory Services Pvt. Ltd. vide Corporate Identity Number: U74140MH2009PTC196260 dated 06/10/2009 (Ref /9/).

The validation team from the interview with the representatives of the PP and from referring the PP’s website* confirmed that implementation of programme is not compulsory or a regulatory requirement on the part of PP. The validation team further investigated whether in India the proposed Programme of Activity is mandatory to PP or investors as a part of Corporate Social Responsibility. This was done by reviewing the weblink, <http://www.thehindubusinessline.com/opinion/columns/b-s-raghavan/article3452595.ece> In the web link, it is described that “*The Corporate Affairs Minister, Mr Veerappa Moily, has given the solemn assurance that private corporate bodies need have no apprehension on this score (Corporate Social Responsibility), adding that “Compliance is not mandatory, (only) reporting is...”*”. The validation team hence confirms that the programme is a voluntary and in the host country i.e. in India, the activities under Programme, is not part of any mandatory regulation to the CME or CPA implementer (in the first real case CPA M/s. General Carbon Advisory Services Pvt. Ltd; is also the CPA implementer). Hence, validation team is of the opinion that the proposed Programme of Activity is not a mandatory but a voluntary activity.

The CME of the programme would bring in investors such as corporate / not-for-profit organisations or companies / individual sponsors / government bodies/trusts /producer organizations or companies/ Micro Finance Institutions (MFIs) /technology suppliers individually or jointly to invest in the proposed project partly or fully to cover the capital cost of the water purification system and may recover such investment through carbon revenue. Equipment costs whether in whole or in part may be financed through carbon revenue. The CME will promote the programme to support the distribution of low/zero greenhouse gas emitting water purification systems providing safe drinking water to the individual households or communities and involve other CPAs into the programme

* <http://www.general-carbon.com/>

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The PoA-DD also describes that during the course of operation/implementation of the programme; if there is any subsidy scheme; promoted by central or state government it may be utilized by the CPA implementer to implement the project. However, additionality will be demonstrated considering all this, in accordance with the “Guidelines for demonstrating additionality of micro-scale project activities, EB 68, Annex 26” (Ref /B4/). This would be done at the CPA level.

In the PoA-DD, the role of the CME is clearly defined; who will help the CPA implementer for distribution and awareness raising for use of Water purification system amongst end-user/beneficiary(ies), monitoring and operations for the CPA(s), and its documentations for verification(s).

The project activity may deploy all the technologies, measures, and devices of low greenhouse gas emitting water purification systems which will achieve water quality as defined in the IS 10500: 2012 (Second edition, May 2012) (Ref /7/). This is clearly described in technology criteria in Section A.6 of the revised PoA DD.

For the confirmation of the water quality as defined in the Indian standard mentioned above, the validation team reviewed a test report issued by a third party, NABL approved laboratory viz. “Envirocare Labs Pvt. Ltd.” who has carried out tests on pre-project water quality vide its report reference no. TH/PM/10/12/462 (Ref /10/), who had completed its analysis on 25/10/2012 (Ref /10/). The above report’s analysis shows that in the first real case CPA the water quality does not meet with the requirements of IS 10500: 2012 (Second edition, May 2012) (Ref /7/) by the Bureau of Indian Standard. As the procurement of the project equipment is not yet done, the PP would ensure at the time of purchase of project equipment that water quality i.e. output quality would be as per National Standard. Hence, the validation team accepts that the project equipment which would be tentatively used in the PoA meets with the intended output water quality as per requirement of the methodology. However, this is not the only equipment type which CME intends to adopt in the programme. As described in section A.6 of the PoA DD the CME/ CPA Implementer may use any of the low green-house emitting water purification system. In order to check the performance of the technology, the water quality would be tested before implementation of the project equipment. In a CPA one or combination of the technology equipments may be used. Since the procurement of the programme activity equipment is dependent on carbon revenue and thus the registration of the PoA, the CME has not finalised the technology to be deployed in the first real case CPA. The submission of ‘test certificates’ as described above is only to demonstrate that CME would preach on installing such equipment which provides required quality output with Low greenhouse gas emitting water purification systems.



Length of the PoA

As described in the PoA DD, Section D.2 and the guidelines of PoA, the length of the PoA is correctly described as 28 years 00 months by the CME.

The Validation team validated the accuracy of the project description through a combination of steps consisting of validation team's site visit, interview with the CPA implementer and interviews with the project participant, their representatives, tentative* end-users/beneficiaries etc.

CAR-1 to CAR-5 were raised as in the PoA DD, the policy/measure were not described, framework developed for the implementation of the proposed PoA and inclusion of CPA was not correct, Voluntary participation in the PoA by the CME was not clarified, explanation on how PoA will reduce GHG emissions or increase GHG removals was not transparently described and contribution of PoA to the sustainable development was not explained correctly. In response to this, the CME corrected the PoA DD. The validation team reviewed this and closed the CARs.

The validation team hereby confirms that the programme description in final PoA-DD (ref /3/) is accurate and complete in all respects.

3.8 Operational and management arrangements (186)

A clear and transparent operational and management arrangement has been established by the management/coordinating entity. Complying with para.186/VVS, the Validation team has assessed the management system described in the PoA-DD in accordance with "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities".

General Carbon Advisory Services Pvt. Ltd; is the coordinating/managing entity (CME) who will implement, coordinate and manage the proposed SSC-PoA. Only the CME will coordinate with UNFCCC and DOE for validation/verification activities and subsequent transactions.

The CME will provide guidance framework for successful implementation of CPA to the CPA implementer(s).

The guidance framework prepared by the CME will give an outline of programme activities that support distribution and awareness creation, capacity building, monitoring, operation & maintenance of community based/household systems, replacement and/or disposal of equipments

* The end user/beneficiaries will be decided at the time of distribution of cook stove based on the baseline survey carried out by PP in particular CPA.



after its lifetime and documentation related to the programme of activities. The monitoring will include tracking of usage of the equipment and testing of water quality parameters. The testing would be by NABL approved laboratory. This is transparently described in the PoA DD. It also transparently describes procedure for maintaining documents in line with the "Simplified modalities and procedures for small scale CDM project activities". As described in the PoA-DD Section A.2, data collected during the entire life time of PoA will be recorded in database and maintained by CME till the last issuance for the CPA included in this PoA +2 years.

CAR-31 to CAR-35 were raised for as in the PoA DD in section C, records of arrangements for training and capacity development for personnel were not provided, procedures for technical review of inclusion of CPAs were not described, procedure to avoid double counting was not correctly described, records and documentation control process for each CPA under the PoA described were not correctly reflected also measures for continuous improvements of the PoA management system were not described in the PoA DD. The PP in response, corrected the Section C of the PoA DD and now all the points are transparently described in line with EB 65, Annex 3 (Ref /B5/). Having reviewed this, the validation team closed these CARs

By above described documents review and interviewing with CME during on site visit, the validation team confirms that the CME has the competencies to check the features of potential CPAs and ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA.

3.9 Eligibility criteria for inclusion a CPA in the PoA (196)

Complying with Para.196/VVS, the Validation team has assessed the eligibility criteria for inclusion a CPA in the PoA in accordance with "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities" and confirms that:

- The eligibility criterias are verifiable

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- The eligibility criterias are sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA.
- The specified eligibility criteria in the PoA-DD are sufficient to ensure that all CPAs would comply with the CDM requirement applicable to the PoA, for details of eligibility criteria are:.The detailed validation of 'appropriateness' of Eligibility criteria is described as under:

The CME has demonstrated that each CPA under the PoA will meet the validation criteria as per the "Standard for the demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities" Annex 3 of EB 65 (Ref /B5/):

In accordance with the EB 55, Annex 38 (Ref /B6/) and as per guidance of EB 65, Annex 3 (Ref /B5/), the PP has described the Eligibility Criteria for CPA to be included in PoA, which is validated by the validation team as under:

Minimum eligibility criteria as per EB 65, Annex 3, Para 14	Validation of eligibility criteria included in the PoA-DD for inclusion of the CPA
a) The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA	<p>Eligibility Criteria: Each CPA will be located within the geographical boundary of India.</p> <p>Validation Justification: The physical boundary of the PoA is identified as entire Host country i.e. India. The low energy water purification systems under each CPA will be distributed within India. The eligibility criteria mentioned above for geographical boundary is well justified and acceptable.</p>
b) Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo)	<p>Eligibility Criteria: For each CPA, the CME will check for double counting by:</p> <ol style="list-style-type: none"> 1) Identification of purification system will be done based on the unique identification code maintained in CME database containing: <ol style="list-style-type: none"> a) Acronym of programme b) Acronym of CME & CPA



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	<p>implementer</p> <p>c) Location of CPA</p> <p>d) Serial number of water purifiers/ water purification systems.</p> <p>2) Monitoring the database (UNFCCC and other GHG ER standards) to check project activity does not generate offsets more than once simultaneously.</p> <p>Validation Justification: The PP has defined mechanism for unique identification number for each low energy water purification systems that will be distributed in the CPA. Also, there is a provision made to check through the data base of UNFCCC and other GHG ER standards to confirm that the project activity does not generate offsets from more than once simultaneously. The validation team accepts this, and confirms that based on this, the double counting can be avoided.</p>
c) The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications.	<p>Eligibility Criteria: In accordance with AMS III.AV version 02 (Ref /B3/), each CPA will deploy technology/measures mentioned in the PoA which complies with the performance target as per "Evaluating household water treatment options: Health based targets and microbiological performance specifications" (WHO 2011) * or a comparable national standard or guideline".</p> <p>➔ Accordingly, each technology will achieve water quality as described in IS 10500: 2012.</p>

* http://www.who.int/water_sanitation_health/publications/2011/evaluating_water_treatment.pdf

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	<p>Second edition, May 2012 or latest amendments if any.</p> <p>Validation Justification: The validation team reviewed the requirements of the methodology and finds that as described in the PoA-DD, the low energy water purification systems to be distributed in the CPA by C/ME will adhere to the Indian Standard IS 10500:2012, Second edition, May 2012 (Ref /7/) or latest amendments if any. This is a “Drinking water specification” describing requirements of parameters of the ‘drinkable/potable’ water for Host Country i.e. India.</p> <p>For the first real case CPA identified by CME (same as PP), the CPA implementer i.e. PP intends to distribute household based low energy water purification systems. In order to demonstrate that the technology/equipment is capable of providing clean & drinkable water in accordance with the IS as mentioned above, the PP provided a test certificate of drinkable/potable purified water. The validation team reviewed the test certificate submitted by the PP. The test is carried out at NABL accredited laboratory viz. “Envirocare Labs Pvt. Ltd.”, who has carried out the tests for the water which is used in the pre-project scenario and also had tested water which is the output of the project equipment, which might be used in this CPA. The test reports shows that purified water which is the intended output from the project activity equipment and are to be distributed in the programme activity meets with the requirements of IS Standard 10500: 2012 “Drinking Water – specification – Second</p>
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	<p>Revision, May 2012 (Ref /7/) hence, such project activity technology/equipments are acceptable. Having reviewed above, the, Validation team accepts this eligibility criteria for technology /measures to be adopted in CPAs under this Programme. However, as implementation has not occurred yet, in order to verify this condition for inclusion of first CPA, FAR-1 has been raised as described below.</p>
d) Conditions to check the start date of the CPA through documentary evidence.	<p>Eligibility Criteria: For each CPA</p> <p>a. The start date will be earliest of the date of</p> <ul style="list-style-type: none"> • Purchase order for the purification systems/water purifiers project <p>b. Start date is after the commencement of validation of PoA i.e. starting date of PoA.</p> <p>Validation Justification: The start date of CPA cannot be prior to the start date of PoA. The eligibility criteria requires checking of start date of each CPA with reference to start date of PoA i.e. 13/06/2012, which is the date of validation start date in accordance with EB 55, Annex 38, para 7(d) (Ref /B6/). The start date of CPA will be cross checked with documentary evidence i.e. purchase order of the low energy water purification systems for the particular CPA. This will be done at the time of CPA addition/inclusion into PoA, hence, this is appropriate and well justified.</p>
e) Conditions that ensure compliance with applicability and other	<p>Eligibility criteria: Each CPA will satisfy the following applicability criteria described in approved</p>

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<p>requirements of single or multiple methodology/ies applied by CPAs</p>	<p>methodology AMS III.AV as mentioned in the section B.3 of the PoA DD. <i>Low greenhouse gas emitting water purification system</i> :</p> <ol style="list-style-type: none"> 1. This methodology comprises introduction of low greenhouse gas emitting water purification systems to achieve water quality defined in a relevant national standard or guideline for drinking water quality.* 2. Water purification system involves point-of-use (POU) or point-of-entry (POE) treatment systems for residential or institutional applications such as systems installed at school or community centre are included. The examples include, but are not limited to water filters (e.g. membrane, activated carbon, ceramic filters), solar energy powered UV (ultraviolet) disinfection devices, photocatalytic disinfection equipment, pasteurization appliances, etc. 3. The methodology is applicable under the following conditions: <ol style="list-style-type: none"> a. Prior to the implementation of the project activity, a public distribution network of safe drinking water does not exist within the total project area and safe drinking water (SDW) if any is produced by the consumers by only using point-of-use or point of entry water purifiers. If during the crediting period SDW is made
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* In case a national standard/guideline for drinking water quality is not available, the most recent standards/guidelines by the World Health Organization (WHO) or United States Environmental Protection Agency (US-EPA) may be applied.



	<p>available in (parts of) a project area through a public distribution network, this methodology cannot be applied anymore to this project area (or part of the project area) from that point in time and the emission reductions pertaining to this project area cannot be claimed from that point onwards. This condition should be checked annually during the crediting period;</p> <p>b. It shall be demonstrated that the application of the project technology/equipment achieves compliance with “protective” * performance target as per “Evaluating household water treatment options: Health based targets and microbiological performance specifications” (WHO, 2011) or a comparable national standard or guideline;</p> <p>c. In cases where the life span of the water treatment technologies is shorter than the crediting period of the project activity, there must be documented measures in place to ensure that end users have access to replacement purification systems of comparable quality.</p> <p>4. Applicability of this methodology is foreseen in the following types of situations that shall be reassessed at the beginning of each crediting period:</p>
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* Protective default performance target is defined by a 2 log₁₀ reduction of bacteria, a 3 log₁₀ reduction of viruses and a 2 log₁₀ reduction of protozoa (“protective”). The reference pathogens shall be C. Jejuni, Cryptosporidium, and rotavirus.



	<p>a. Case 1: Project activities implemented in rural or urban areas[*] of countries with proportion of rural or urban population using an improved drinking-water source equal to or less than 60 % confirmed by one of the three options below:</p> <ul style="list-style-type: none"> i. Proportion of populations using an improved drinking-water source for the most recent year for which data is available from WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation shall be used (http://www.wssinfo.org/data-estimates/table/) for this purpose. Definition of improved and unimproved drinking water source shall be as per the information provided by JMP; ii. Using official data such as publicly available statistical data from a government agency or an independently commissioned study by an international organization or an university; iii. Using survey methods (use 90/10 confidence/precision for sampling);
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* As per the WHO/UNICEF Joint Monitoring Programme for water supply and sanitation.

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	<p>b. Case 2: Project activities implemented in areas not included in Case 1.</p> <p>Validation Justification: The validation team has validated the applicability conditions in this report. The same applicability conditions of the applied methodology will also be validated during addition of each CPA, hence, this is acceptable.</p>
f) The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality.	<p>Eligibility Criteria: Each CPA will demonstrate the additionality as per the requirements of methodology AMS III.AV. in accordance with "Guidelines on demonstration of the additionality of micro scale project activities", version 04, Annex 26, EB 68 (Ref /B4/).</p> <p>Validation Justification: The PoA-DD describes that additionality would be shown at the CPA level. This is acceptable as, the additionality can be demonstrated at PoA level or at individual CPA level.</p> <p>The PP has decided to demonstrate this at CPA level using in accordance with "Guidelines on demonstration of the additionality of micro scale project activities", version 04, Annex 26, EB 68 (Ref /B4/). The CME has adopted recent guideline i.e. as per EB 68 publication. hence, this criteria is acceptable.</p>
g) The PoA-specific requirements stipulated by the CMEs including any conditions related to undertaking local stakeholder consultations and environmental impact analysis.	<p>Eligibility Criteria: Each CPA will undertake local stakeholder consultations as follows :</p> <p>a. Identification of local stakeholders (identified by CME and CPA implementer)</p> <p>b. Invitation to local stakeholder</p>



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	<p>consultation or meets</p> <p>c. Description of the CPA project activity</p> <p>d. Inviting comments from local stakeholders</p> <p>e. Compilation of the comments and responding with corrective actions as required.</p> <p>The project activity does not fall under the purview of the Environmental Impact Assessment (EIA) notification of the Ministry of Environment and Forest, Government of India, 2006[*]. Hence, it is not required to be conducted for this programme.</p> <p>Validation Justification: As per the PoA-DD guidance, choice of the local stake holder consultation and environmental impact analysis has been justified in the PoA-DD. The PP has explained the same in relevant section F.1, F.2 and F.3 of the PoA-DD. The project participant has stipulated that since the programme of activity involves Distribution of low energy water purification systems, which will be used at CPA level, the effect on environment could be better judged at CPA level. Hence, local stake holder consultation would be better addressed at local/CPA level, hence, accepted.</p> <p>As per the local host country, it does not mandate any requirement of Environmental impact analysis for the proposed Programme of activity[†]. The validation team reviewed this and accepted the same. The same is explicitly justified by the validation</p>
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^{*} <http://www.envfor.nic.in/legis/eia/so1533.pdf>

[†] <http://www.envfor.nic.in/legis/eia/so1533.pdf>



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	team later in this report, hence, acceptable.
h) Conditions to provide an affirmation that funding from Annex I parties if any, does not result in a diversion of official development assistance.	<p>Eligibility Criteria: Each CPA will demonstrate that no Official Development Assistance (ODA) is being used. This may be evidenced through any of the following:</p> <ul style="list-style-type: none"> a. Undertaking by CPA implementer to the CME b. Certificate by CPA implementer's Chartered Accountant provided after the procurement of equipment. <p>Validation Justification: The validation team observed that at present there is no low energy water purification systems purchased. The PP intends to purchase the low energy water purification systems after the PoA is registered. The PP has sought a clarification on this from UNFCCC, who clarified vide email dated 14/02/2012 that this is acceptable. (Ref /12/). Hence, at present it is not possible to confirm the investment details to be made by CPA implementer. It is also to be clarified that investment in the PoA would be made by organisations or companies / individual sponsors / government bodies/trusts /producer organizations or companies/ MFIs /technology suppliers individually or jointly. However, investment made can further be checked at the time of verification/inclusion of CPA(s) to the registered PoA.</p> <p>For the first real case CPA, the CPA implementer viz. General Carbon Advisory Services Pvt. Ltd (who is the CME) has provided an undertaking which states "<i>the CPA investment would be financed through its own sources and there is</i></p>



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	<p><i>no ODA involved into” (Ref /13/). The validation team accepts this, looking at the credentials of the CPA implementer (i.e. CME), also funding pattern can be checked at the time of verification. The DOE confirms that this does not mean any conditional validation. However, as implementation has not occurred yet, in order to verify this condition for inclusion of first CPA, FAR-1 has been raised as described below.</i></p>
<p>i) Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation)</p>	<p>Eligibility Criteria: The target group of each CPA will be rural households/communities currently using fossil fuel or non renewable biomass in traditional 3 stone fired systems to boil water as means of water purification and currently do not have access to safe drinking water.</p> <p>The households or communities would be identified by government identified list of families who are ‘below poverty line’ card holders and/or ration card and/or electoral card and/or any other government approved identification card.</p> <p>Validation Justification: As described in the PoA-DD, there would be different people/beneficiaries whom PP would like to distribute low energy water purification systems, who are using traditional 3 stone fired systems to boil water as means of water purification. The identification of the beneficiary can be by means of any of the government authorized documents, hence, it ensures that the program activity is in the host country only i.e. India., hence the validation team finds this as appropriate. However, as implementation has not occurred yet,</p>



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	in order to verify this condition for inclusion of first CPA, FAR-1 has been raised as described below.
j) Where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys.	<p>Eligibility Criteria: Each CPA will conduct sampling and surveys as appropriate or applicable based on monitoring requirements of :</p> <ul style="list-style-type: none"> a. Sampling & survey methods described in the approved methodology AMS III.AV. <i>Low greenhouse gas emitting water purification systems</i>, which refers para 17 of AMS I.E (Ref /B8/). b. Standard for sampling and surveys for CDM project activities and programme of activities”, version 03.0 - EB 69, Annex 4 (Ref /B9/), and Guidelines for sampling and surveys for CDM project activities and programme of activities, version 02 - EB 69 Annex 5. (Ref /B10/) <p>The CPA implementer will conduct survey for baseline identification and monitoring.</p> <p>Validation Justification: The sampling requirements have been described in the PoA-DD.. As per the methodology AMS III AV version 2, the CPA would follow the sampling as per AMS I E. Accordingly, for sampling para 17 of AMS. I.E. ver 5.0 would be followed. While reviewing this, it states to refer “Standard for sampling and surveys for CDM project activities and programme of activities”. Accordingly, PP has followed EB 69, annex 4 (Ref /B9/), EB 50, Annex 30 and EB 65, Annex 2 (Ref /B12/).</p> <p>An illustration of sampling in accordance with ver 2.0 – EB 69,</p>

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	<p>annex 5, EB 65 Annex 2 is explained in detail in the PoA DD which is applicable to all the CPAs included in the PoA. Baseline survey would be carried out for each CPA to confirm the water quality and determine technology to be implemented in the project activity. Each CPA to be included in the PoA will follow the same sampling and surveying procedure mentioned in the revised PoA DD section hence, this criterion is accepted.</p>
<p>k) Where applicable, the conditions that ensure that CPA in aggregate meets the small-scale or micro-scale threshold criteria and remain within those thresholds throughout the crediting period of the CPA.</p>	<p>Eligibility Criteria: Each CPA will meet the following small-scale threshold criteria as per EB 61, Annex 21, "General Guidelines to SSC CDM methodologies", version 17 (Ref /B14/)</p> <ul style="list-style-type: none"> ➤ Each CPA will show that the emission reductions every year will not go beyond the limits of 60 ktCO₂e/y over the entire crediting period. <p>Validation Justification: The validation team validated the algorithm in this report later.. The same algorithm has been used by the PP to estimate the emission reduction in the first real case CPA. The PP has submitted the emission reduction spread sheet (Ref /14/) for the first real case CPA. The validation team reviewed the same and finds that the energy savings in first real case CPA is 0.899 ktCO₂e/year which is less than 60 ktCO₂e per year that is a threshold for Type III project activities. Hence it is confirmed that the proposed SSC-CPA 001 under this PoA qualifies as Type III project.</p> <p>The claimed energy saving would be cross checked with the emission</p>

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	reduction calculation spread sheets at the time of each CPA addition throughout the entire crediting period.
l) Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or microscale project categories	<p>Eligibility Criteria: Each CPA will not undergo debundling check as per EB 54 Annex 13, version 03, para 10 "Guidance for determining the occurrence of debundling under a PoA" (Ref /B15/).</p> <p>➤ If each of the independent subsystems/measures (e.g., biogas digester, solar home system) included in the CPA of a PoA is no larger than 1% of the small-scale thresholds defined by the methodology applied, then that CPA of PoA is exempted from performing de-bundling check i.e., considering as not being a de-bundled component of a large scale activity.</p> <p>Each independent subsystems/measures included in the CPA will have annual emission reduction not greater than 0.6 ktCO₂e (= 1% of 60 ktCO₂e)</p> <p>Validation Justification: The validation team will cross verify the details of proposed SSC-CPA to be added in the PoA from the UNFCCC website and other publicly available sources to ensure that the proposed SSC-CPA is neither registered as an individual CDM project activity nor included as a CPA of another registered PoA involving energy efficient initiatives. This is an appropriate criterion to ascertain the registration/non-registration of the SSC-CPA being added to the PoA at the time of inclusion of CPA in the PoA during validation.</p>

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	<p>The validation team will also assess the de-bundling criteria of the SSC-CPA being added to PoA in accordance with latest approved version of the Guidelines on assessment of de-bundling for SSC project activities</p>
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CAR-15 to CAR-20 were raised as the web hosted PoA-DD, did not cover following : Demonstration of the additionality of CPA in accordance with the requirements of the methodology (ies) applied, the additionality for the combinations of technology measure and methodology were not described in the B.2 section of webhosted SSC-PoA-DD, The local stakeholder consultation conditions were not clearly described in the B.2 section of webhosted SSC-PoA-DD, the eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD did not describe the identification of target group and the distribution mechanisms in accordance with the para 14j of Annex 03 EB 65, The de-bundling criteria were not correctly described in the eligibility condition. In response to this, the CME corrected the PoA DD in line with EB 65, Annex 3. The validation team also checked that it is in line with EB 55, Annex 38, hence, these CARs were closed.

FAR-1 was raised since the technology/equipment supplier of the efficient cook stove is not finalized, hence In line with VVS version 3, paragraph 27, the validation team raised FAR-1 asking how the actual water purification distributed would comply with the eligibility criteria (c) (i.e. the specification complying with IS Standard 10500:2012, May 2012, (h) (i.e. no Official Development Assistance (ODA) being used) and (i) (i.e. The target group of each CPA being rural and/or urban households currently boiling the water for purification was not made clear. This was raised in line with VVS version 3 paragraph 27. In response to this, the PP explained that the implementation of the first CPA (real case) is not done. As described in section D.5 of CPA DD, all the relevant document for the conditions specified in the eligibility criteria will be submitted to the DOE at the time of verification. It will be ensured that CPA inclusion will be only after satisfying all the eligibility criteria in line with eligibility criteria of Section B.2 of Part I of PoA DD and in B.5 of Part II of PoA DD (includes generic CPA DD). The validation team reviewed the response provided by the PP and found that the response is acceptable, and for the first real case CPA, all the relevant documents as described in the 'eligibility criteria' shall be verified by the verifying DOE.

Cross effect:

As per annex 3, EB 65, para 28 for the application of multiple small scale technologies “Combinations of technologies/measures and/or methodologies for a PoA are eligible where it is demonstrated that there are no cross effects between the technologies/measures applied. The cross effects between technology/methodologies s will be checked at CPA level. Since the only applicable methodology is AMS III.AV, the above guideline is not applicable for this PoA.

CAR 22 was raised as in the PoA-DD the combinations of technologies and methodologies applied under the current PoA were not demonstrated which can have cross effects between the technologies. In response to this, the CME clarified that since at this moment it is not possible to understand cross effect of different technologies, however, in CPAs while implementation, this would be considered while including CPA to this PoA. Having reviewed this, the validation team closed the CAR.

Based on the above assessment, the validation team is of the opinion that the eligibility criteria defined in the PoA-DD are in accordance with the requirements laid down in Para 4 of EB 65, Annex 3, which also includes eligibility criterion for additionality as per EB 55, Annex 38. Further, the eligibility criteria defined above are verifiable and DOE can determine that the eligibility criteria are sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs, which is in accordance with EB 65, Annex 3 para 15 and 16. For the real case CPA i.e. for the CPA-001 which is to be implemented in the geographical area of the village Lahe, Rass, and Dorychapada of Shahapur Taluka, the validation of eligibility criteria has been reported in the CPA validation report

3.10 Baseline and monitoring methodology

3.10.1 Applicability of the selected baseline and monitoring methodology (77)

As described in the PoA-DD, the programme of activity is providing low green house gas emitting water purification systems to rural household/communities. The PP has applied only one methodology viz. AMS III AV version 02. The steps taken to assess the relevant information contained in the PoA-DD against each applicability condition and how it meets the requirement of the applicability condition are described below.

Applicability condition 1: *This methodology comprises introduction of low greenhouse gas emitting water purification systems to achieve water quality defined in a relevant national standard or guideline for drinking water quality*

Justification by validation team: The validation team referred revised PoA-DD Section B.3 – “Application of methodologies” and confirms that

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the PP intends to use low greenhouse gas emitting water purification system complying with the national standard in accordance with AMS III.AV ,version 02 and achieve water quality as described in IS 10500: 2012, second edition, May 2012. The validation team reviewed the IS and finds that it specifies the parameters for the drinking water in India. The project activity equipment would follow the same for the clean water, since, the programme activity is meant to be implemented in India, this applicability condition is satisfied.

The validation team also confirms that the applicability condition for CPA is included correctly in the Section B.2 “Eligibility criteria for inclusion of a SSC-CPA in the PoA”. This is same as described in the approved methodology AMS III AV version 2. Accordingly, for each CPA, while its inclusion to PoA, this will be checked and validated by the validation team and would be reported in each CPA validation report

Applicability condition 2: *Water purification technologies that involve point-of use (POU) or point-of-entry (POE) treatment systems for residential or institutional applications such as systems installed at a school or a community centre are included. The examples include, but are not limited to water filters (e.g. membrane, activated carbon, ceramic filters), solar energy powered UV (ultraviolet) disinfection devices, photocatalytic disinfection equipment, pasteurization appliances, etc.*

Justification by the Validation team: As described in the PoA-DD and in the generic CPA-DD the proposed CPAs will include a technology that involves point-of-use treatment systems for residential and/or institutional applications. The validation team during its site visit of the first real case CPA found out that the PP intends to use Point-of use systems. For this, in the first real case CPA, the PP is considering the use of a water purification system which would be of point of use type. The validation team was provided the certificate for the water quality it achieves. The test certificate of water is issued by M/s. “envirocare labs pvt. Ltd.” who has carried out tests on pre-project water quality vide its report reference no. TH/PM/10/12/462, had completed its analysis on 25/10/2012 and for project equipment output water quality test vide its report no. TH/PM/10/12/464 completed on date 20/10/2012. Having reviewed this, the validation team is of the opinion that the project equipment to be used in the first real case CPA is capable of providing drinking water as per national standard in India, i.e. IS 10500:2012, hence this is acceptable and applicability condition 2 is met with. Although the PP has not decided the technology supplier at this moment, during discussion with the PP, it is clarified that whatever the technology is used in CPA, there will be proper testing of the equipment to check whether it provides the ‘drinkable water’ as per the requirement of the national standard i.e. IS



10500:2012, second edition or revisions in future, hence, this is acceptable by the validation team.

Applicability condition 3 a): *Prior to the implementation of the project activity, a public distribution network of safe drinking water does not exist within the total project area and safe drinking water (SDW) if any is produced by the consumers by only using point-of-use or point-of-entry water purifiers. If during the crediting period SDW is made available in (parts of) a project area through a public distribution network, this methodology can be applied anymore to this project area (or part of the project area) from that point in time and the emission reductions pertaining to this project area cannot be claimed from that point onwards. This condition should be checked annually during the crediting period.*

Justification by validation team: As described in Section B.3 of the PoA DD, the CPA will be undertaken in such regions that are not covered by any public distribution network of safe drinking water (SDW). For the first real case CPA, the validation team had visited the villages Lahe, Raas and Doryachapada where the CPA implementation is planned. The validation team observed that there is no existing public water distribution system which can provide safe drinking water in these villages. In order to substantiate the claim of 'unsafe' drinking water, the PP/CME has suggested that there will be a test carried out in the CPA areas to check if the water is unsafe in the baseline. The test(s) would be carried out by the NABL approved laboratories for each CPA. This is clearly described in the Section B.2 of the PoA DD in the eligibility criteria for inclusion of CPA, hence, validation team accepts that this applicability condition is satisfied.

Applicability condition 3(b): *It shall be demonstrated that the application of the project technology / equipment achieves compliance with "protective" performance target as per "evaluating house household water treatment options": Health based targets and microbiological performance specifications" (WHO, 2011) or a comparable national standard or guideline;*

Justification by validation team: As described in Section B.3 of the PoA DD, the PP/CME would employ only those technology(ies) in the CPA which provides drinking water in accordance with the national standard i.e. IS 10500:2012, Second edition, May 2012 or the latest edition/standard. This is in line with the applicability condition 3(b); hence, this applicability condition is satisfied.

Applicability condition 3(c): *In cases where the life span of the water treatment technologies is shorter than the crediting period of the project activity, there must be documented measures in place to ensure that end users have access to replacement purification systems of comparable quality.*



Justification by validation team: As described in Section B.3 of the PoA DD, the PP/CEM would arrange for documented measure/procedures for replacement of part or whole purification systems which are of comparable quality. The life span of the water purification system is more than 10 years. However, the cartridge which purifies the water requires replacement after certain time period/quantity of water purified*. This is easily available in the market. If this is not available, equivalent water purification system is also available in the Host Country. The validation team based on its sectoral knowledge confirms this, and accepts that the applicability condition 3(c) is satisfied.

Applicability condition 4: *Applicability of this methodology is foreseen in the following types of situations that shall be reassessed at the beginning of each crediting period:*

(a) *Case 1: Project activities implemented in rural or urban areas[†] of countries with proportion of rural or urban population using an improved drinking-water source equal to or less than 60 % confirmed by one of the three options below:*

(i) *Proportion of populations using an improved drinking-water source for the most recent year for which data is available from WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation shall be used (<http://www.wssinfo.org/data_estimates/table/>) for this purpose. Definition of improved and unimproved drinking water source shall be as per the information provided by JMP;*

(ii) *Using official data such as publicly available statistical data from a government agency or an independently commissioned study by an international organization or an university;*

(iii) *Using survey methods (use 90/10 confidence/precision for sampling);*

(b) *Case 2: Project activities implemented in areas not included in Case 1.*

Justification by validation team: As explained by the PP in Section B.3, the PP referred case 1 (i) and the weblink of UNICEF (<http://www.wssinfo.org/data_estimates/table/>) as prescribed in the methodology. This weblink describes that Project activities implemented in rural or urban areas[‡] of India with proportion of rural or urban

* As per the manufacturer's certificate

† As per the WHO/UNICEF Joint Monitoring Programme for water supply and sanitation.

‡ As per the WHO/UNICEF Joint Monitoring Programme for water supply and sanitation.



population using an improved drinking-water source is 92% till the year 2010, which is more than 60%, hence, the PP/CME has not used Case 1. Hence, automatically Case 2 is adopted by the PP. The validation team referred the UNICEF weblink and finds this appropriate and agrees that Case 2 is applicable for the proposed programme of activity.

CAR 20 was raised as in the web hosted PoA-DD, The technology measures were not referenced correctly in Section B.3 in accordance with the Guidelines for completing the programme design document form for small-scale CDM programme of activities (version 02.0).

CAR-23 was raised as in the Section B.3, the combination of methodology and technology measure applicable under the PoA applicable for each CPA were not described.

CAR-24 was raised as the web hosted PoA-DD did not correctly stated applicability of methodology (ies) for each CPA and technology measures implemented by the CPA. In response to this, the CME corrected the PoA-DD wherein the technology measures are now correctly described and description of combination of technology and its effects on each would be taken in CPA is described. Also, the applicability conditions with its justification are now correctly described. Having reviewed this, the validation team closed the CARs.

The DOE hereby confirms that the selected baseline and monitoring methodology AMS III AV version 2 (Ref /3/), Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion and other methodology component i.e. AMS I E (Ref /B8/) is applicable to CPAs to be included in the PoA, which complies with all the applicability conditions therein.

3.10.2 PoA boundary (192)

Boundary for the PoA in terms of geographical area is identified as; whole the Host country i.e. India. The applied methodology viz. AMS III AV Version 02 describes that the project boundary includes the physical, geographical sites of the low green house gas emitting technology (ies) for water purification installed by the project activity. Accordingly, as described in the PoA DD, the project boundary is the geographical area of the host country i.e. India.

The validation team validated the project boundary by assessing the PoA-DD, which describes that the distribution of the low green house gas emitting water purification systems would be in the entire host country, India, where CPA can be rural or urban communities / households within the boundary of India. The validation team confirms that the project



boundary described under Section A.5 of the revised POA-DD correctly represents the project boundary as mandated by the applied methodology. This was also confirmed by the Host Country Approval issued by the Host Country DNA i.e. India vide its reference no. 4/15/2012/CCC dated 22/11/2012 (Ref /5/)

The eligibility criteria of the CPA boundary is also described and validated above in Section 3.9 “Eligibility criteria for inclusion a CPA in the PoA” as per EB 65, Annex 3

Bureau Veritas Certification confirms that in establishing the boundary of the PoA, the project participants have taken into consideration all applicable national and/or sectoral policies and regulations within that chosen boundary.

3.10.3 Baseline identification (94-95)

The steps taken to assess the requirement given in paragraph 94 and 95 of the VVS are described below:

The baseline is the use of fossil fuel or non renewable biomass (NRB) to boil water as means of water purification in the absence of the project activity. In this PoA, it is proposed to introduce low energy greenhouse gas emitting water purification systems which produces a water quality that meets the national standard IS 10500: 2012, second revision, May 2012 or any latest guideline/ standard/amendment.

The low greenhouse gas emitting water purification systems (project equipment) will be distributed in the rural and urban areas of the Host Country, India. The project activity is classified under a low greenhouse gas emitting water purification system.

As per the methodology AMS III AV version 02, para 6 “For a simplified and standardized approach it is assumed that fossil fuel or non-renewable biomass (NRB) is used to boil water as means of water purification in the absence of the project activity.”

In the Section A.2, it is stated that there are no national policies which mandates the installation of such water purification systems. As described earlier, the validation team investigated this and also from its local sectoral knowledge confirms that there are no national policies which mandate the installation of low emission water purifier to the PP.

The debundling is explained in accordance with the Annex 13 of EB 54 (Ref /B15/) in a conservative manner in the PoA-DD. Accordingly,

- a) If each of the independent subsystems/measures (e.g., biogas digester, solar home system) included in the CPA of a PoA is no larger than 1% of the small-scale thresholds defined by the methodology applied, then that CPA of PoA is exempted from



performing de-bundling check i.e., considering as not being a de-bundled component of a large scale activity.

- b) The threshold to prove the activity is not a debundled action is deduced from the micro scale threshold for each CPA, which corresponds to 60 ktCO₂e. per year as follows: 1% of 60 ktCO₂e = 0.6 ktCO₂e

The validation team hereby confirms that the selected baseline and monitoring methodology, AMS III AV Version 2 is previously approved by the CDM Executive Board, and is applicable to the project activity, which complies with all the applicability conditions therein. The small scale methodology AMS III AV Version 2 (Ref /B3/) is applied in conjunction with the latest version of General Guidance to SSC CDM methodologies.

Based on the above assessment, the validation team hereby confirms that:

- a) All the assumptions and data used by the project participants are listed in the PoA-DD, including their references and sources;
- b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PoA-DD;
- c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
- d) Relevant national and/or sectoral policies and circumstances are considered and listed in the PoA-DD;
- e) 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 PoA.



3.10.4 Algorithms and/or formulae used to determine emission reductions (99-100)

The steps taken to assess the requirement outlined in paragraph 99 the VVS are described below:

As prescribed in the methodology and replicated in the Generic CPA-DD; following equations are used for the estimation of emission reduction.

$$BE_y = QPW_y * SEC * f_{NRB,y} * EF_{projected - fossilfuel} * 10^{-9}$$

Where,

Parameter	Description	Source/justification by validation team
BE_y	Baseline emissions during the year y in (tCO ₂ e)	Calculated in the emission reduction sheet.
QPW_y	Quantity of purified water in year y (litres) For Case 1 the quantity of purified water is the total amount of water treated by the project activity as established per paragraph 6 in year y . For Case 2 the quantity of purified water is monitored, and the total amount is subject to a cap derived from the number of total project population for which it can be demonstrated through documentation that the common practice of water purification	Since the PP has applied Case 2, the quantity of purified water would be monitored, and the total amount would be subject to a cap derived from the number of total project population. This will be demonstrated through documentation that the common practice of water purification is or would have been water boiling multiplied by the maximum volume of drinking water per person per day, set at 5.5 litres* per person per day. The demonstration would be by means of annual survey in the CPA area, where sampling will be applied as per 90:10 precision accuracy. The sampling is validated in report later. For the first real case CPA, the PP/CME has provided the estimated quantity of purified water in year y in Litres.

* Based on WHO recommendations (Domestic Water Quantity, Service Level and Health, Table 2: Volumes of water required for hydration, WHO 2003).

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	is or would have been water boiling multiplied by the maximum volume of drinking water per person per day, set at 5.5 litres*	
SEC	Specific energy consumption required to boil one litre of water (kJ/L)	<p>As described in the methodology, as per equation (2), it is calculated as follows:</p> $SEC = [WH * (T_f - T_i) + 0.01 * WHE] / n_{wb}$ <p>m) WH = Specific heat of water (kJ/L °C) = The PP has used default value of 4.186 kJ/L °C, hence, acceptable.</p> <p>n) Tf = Final temperature (°C) = The PP has used default value of 100 °C[‡], hence, acceptable.</p> <p>o) Ti = Initial temperature of water (°C) = The PP has used a default value of 20°C, hence, acceptable.</p> <p>p) WHE = Latent heat of water evaporation (kJ/L) = The PP has a default value of 2260 kJ/L, hence, acceptable.</p> <p>q) n_{wb} = 0.10 default value is used by the PP in line with the methodology, since the replaced system or the system that would have been used is a three stone fire or a conventional system for woody biomass lacking improved combustion air supply mechanism and flue gas ventilation system i.e. without a grate as well as a chimney;</p>

* Based on WHO recommendations (Domestic Water Quantity, Service Level and Health, Table 2: Volumes of water required for hydration, WHO 2003).

‡ Boiling point of water at standard conditions.



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$f_{NRB,y}$	Fraction of woody biomass used in the absence of the project activity in year y that can be established as non renewable as per the relevant provisions of AMS-I.E "Switch from Non-Renewable Biomass for Thermal Applications by the User". If the displaced fuel is fossil fuel use a default value of 1.0	The PP has considered $f_{NRB,y}$ for the estimation purpose for the first real case CPA in line with the methodology AMS I E version 05. The determination of f_{NRB} will be done based on the availability of data of a) country or b) state or c) district For the CPAs, the PP has described in the PoA DD that it would consider conservative of all the three above, hence, acceptable.
$EF_{projected_fossilfuel}$	Emission factor as per AMS-I.E procedures when NRB is displaced or the emission factor of the fossil fuel substituted (tCO ₂ /TJ)	81.6 tCO ₂ /TJ as per IPCC guideline, hence, acceptable.

Values fixed ex-ante for the PoA to be used in each CPA:

WH	= Specific heat of water (kJ/L °C) = default value of as per methodology = 4.186 kJ/L °C, hence, acceptable.
Tf	= Final temperature (°C) = default value as per methodology = 100 °C*, hence, acceptable.
Ti	= Initial temperature of water (°C) = default value as per methodology = 20°C, hence, acceptable.
WHE	= Latent heat of water evaporation (kJ/L) = default value as per methodology = 2260 kJ/L, hence, acceptable.
n_{wb}	= 0.10 default value is used by the PP in line with the methodology, hence, acceptable. Since the replaced system or the system that would have been used is a three stone fire or a conventional system for woody biomass lacking improved combustion air supply mechanism and flue gas ventilation system i.e. without a grate as well as a chimney;

* Boiling point of water at standard conditions.



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$EF_{\text{projected_fossilfuel}}$	= Emission factor as per AMS-I.E procedures when NRB is displaced or the emission factor of the fossil fuel substituted (tCO ₂ /TJ) = 71.9 tCO ₂ /TJ as per IPCC guideline, hence, acceptable.
L = Gross adjustment factor for Leakage; a Correction factor	0.95 applied as a fraction in accordance with AMS-I E, Version 05

Following parameters are to be monitored for emission reduction calculations:

$N_{P,y}$	No. Of functional project appliance (Water purification system) in each CPA in operating conditions
QPWy	Quantity of purified water in year y in Litre
P_y	Total persons supplied with purified water
$f_{NRB,y}$	Fraction of woody biomass used in the absence of the project activity in year y that can be established as non-renewable biomass. $f_{NRB,y} = \frac{NRB}{NRB + DRB}$
NRB	Non renewable biomass
DRB	Demonstrably renewable biomass
Existence of public distribution network of safe drinking water	Unitless factor
Proportion of total population for which the common practice of water boiling is or would have been water boiling	%age
Average volume of drinking water per person per day	Litres/person/day
Water quality	Water quality is defined in IS 10500:2012 (2 nd revision) or latest revision/standard/amendment if any, in order to check the performance of the operating water purification system
Fossil fuel	Consumption of fossil fuel in the CPA region



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	for the project activity
Electricity Consumption	Electricity consumption during operation

By is the biomass which otherwise would have been used in the baseline
Where,

By	<p>Quantity of woody biomass; which otherwise would have been used in the baseline. The same is estimated as per Para 6 (a) of the approved methodology AMS I E, version 5, as directed by the methodology AMS III AV version 2. The methodology AMS I E Para 6 (a) states “By is determined by using one of the following options: (a) Calculated as the product of the number of appliances multiplied by the estimate of average annual consumption of woody biomass per appliance (tonnes/year); This can be derived from historical data or estimated using survey methods; ”. Accordingly, the PP has used the survey method to determine the quantity of By, which is acceptable by the validation team.</p> <p>To arrive at the value of By, in the survey method it has sourced the value of quantity of woody biomass consumed for total consumption in the house hold and based on the historical data published by national statistics using authentic government sources and studies which use remote-sensing data and survey of local usage. The analysis for deciding quantity of woody biomass which otherwise would have been used in the baseline is carried out by Prof. A. P. Patil, Head, Department of Statistics, B. N. Bhandarkar College of Science, Thane – 400 601.* This survey and analysis being done under the guidance of third party, qualified, academic person, the validation team has accepted the survey results for the first real case CPA. (Ref /16/)</p>
DRB	<p>Demonstrably renewable biomass, monitored and calculated parameter from the national statistics using authentic government sources and studies which use remote-sensing data and survey of local usage carried.</p> <p>This has been calculated using the publicly available data from Government of India. For the calculation, PP has used Population of Thane District, total forest cover and Biomass productivity of Thane District, energy equivalent of firewood giving the total fuel wood availability in Thane</p>

* Baseline survey report on prevailing fuel consumption for cooking purpose in Thane District, Maharashtra.



	District This is clearly described in the emission reduction sheet. (Ref /14/)
NRB	Calculated value from By and DRB NRB = By-DRB

The $f_{NRB,y}$ is calculated as per equation (6) of methodology as under :

$$f_{NRB,y} = NRB/(NRB+DRB)$$

The detailed calculation of B_y , NRB , $f_{NRB,y}$ is explained in CPA validation report.

Project emission:

As described in the methodology, Para 9, “If the operation of the project water purification system involves consumption of fossil fuels and/or electricity, project emissions* include:

- CO2 emissions from on-site consumption of fossil fuels due to the project activity shall be calculated using the latest version of the tool .Tool to calculate project or leakage CO2 emissions from fossil fuel combustion.;
- CO2 emissions from electricity consumption by the project activity using the latest version of the tool .Tool to calculate baseline, project and/or leakage emissions from electricity consumption..

The PoA DD in Section B.6.3, describes that whenever, in the CPA, the water purification system involves consumption of fossil fuels and/or electricity accordingly, project emission would be calculated. This is acceptable to the validation team.

Leakage:

As described in Para 10, of the methodology, AMS III AV, version 02, “Where relevant leakage relating to the non-renewable woody biomass shall be assessed as per the relevant procedures of AMS-I.E.” accordingly, the PP has reviewed the AMS- I E version 05. Hence, the PP has multiplied the B_y (Quantity of woody biomass that is substituted or displaced in tonnes) by a net to gross adjustment factor of 0.95 to account for leakages; this is in line with the para 18 of the methodology, hence this is acceptable to the validation team.

The Validation team observed that in order to identify the project activity water purification system, the CME has made an arrangement, (as

* Calculations of the project emissions may also be limited to the quantity of purified water used for the baseline calculations as per paragraph 6.



described in eligibility criteria). With this, the tracking of water purification system can be done. Hence, at any moment, the project activity water purification system being currently utilised is transferred from outside the boundary of the project activity it can be differentiated based on identification marks on it and can be cross checked with the record available with the CPA implementer. Also, sampling approach has been adopted which will take care of number of water purification system operating as well as number of water purification system existing in the CPA till its crediting period. This approach being most realistic, the Validation team accepted this.

From the above description, the validation team confirms that for the CPA to be included in the present PoA, para 6-9 and 18 are well addressed and sufficient care has been taken to monitor parameters as per Para 10-17 as per methodology requirement.

CAR-57 to CAR-59 were raised in the web hosted PoA DD and in the CPA DD, as in the *Part II section B.6.1 of webhosted SSC-PoA-DD calculations for leakage emissions were not in accordance with the AMS I E*, equations used for the calculating emission reductions were not cross referenced with the methodology in the Part II B.6.1 section of webhosted SSC-PoA-DD, and in Part II section B.6.2 of webhosted SSC-PoA-DD the data parameters to be monitored during the crediting period were not in accordance with the methodology, AMS III AV version 02. The CME in response to these CARs corrected the calculations in accordance with AMS III AV version 2, AMS I E version 5, and provided source/reference wherever required. Having reviewed this, the validation team closed the CARs.

Conclusion:

The detailed algorithms for calculating the emission reductions are transparently described under sections B.6.3 of the revised PoA-DD (Ref /3/). This is same as described in approved methodology AMS III AV version 2.

An illustration of baseline emission, project emission and leakage is described in the PoA-DD in Section B.6.3. The validation team has assessed the calculations of the estimated Emission Reductions as provided by project participant in a spreadsheet for the first real case CPA (Ref /14/) and confirms that the calculations are correct and transparently showing values having used appropriate source(s). Details on sources used for different parameters is described in the validation report of real case CPA.



Based on the above assessment, the validation team hereby confirms that:

- a) All assumptions and data used by the project participants are listed in the PoA-DD, including their references and sources;
- b) All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PoA-DD;
- c) All values used in the PoA-DD are considered reasonable in the context of the proposed CDM project activity;
- d) The baseline methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions;
- e) All estimates of the baseline emissions can be replicated using the data and parameter values provided in the PoA-DD.

3.11 Additionality of PoA

The proposed CDM PoA is a micro scale project activity as per the classification of type III projects. The additionality of the proposed CDM PoA has been demonstrated at the CPA level. The same is demonstrated as per Guidelines for demonstrating additionality of microscale project activities version 4. The additionality of the micro scale project is demonstrated by showing that each of the CPA follows paragraph 4 and subpara 4b option b

The detailed steps are described here below.

Prior Consideration of the Clean Development Mechanism (26-29)

The proposed CDM PoA involves distribution of low energy greenhouse gas emitting water purification systems in India. As per EB 55, Annex 38, Para 7 (d) the start date of the PoA is the date on which the CDM-POA-DD is first published for global stakeholder consultation. This was checked with the web hosting of the PoA-DD on UNFCCC website. Accordingly, the PoA start date is described as 13/06/2012 in the PoA-DD, which is acceptable. During the site visit by the validation team and interviews of the representatives of CME who is also the first real case CPA implementer, it was indicated that implementation of the programme would be only after registration of the PoA. Hence, start date of the CPA would be after the start date of the PoA.

No need of prior consideration:

As reported above, the starting date of the programme activity is 13/06/2012 (validation start date = Web Hosting of the PoA), which is after 2nd August 2008. Validation team referred EB 60, Annex 26, Para 3, which states “*board agreed that the guidelines for demonstration and*



assessment of prior consideration of the CDM do not apply to PoAs as at present it is expected that no component of the programme will commence prior to the start date of validation" The validation team also confirmed this from the e-mail; where PP has sought a clarification from UNFCCC. In response the UNFCCC vide E-mail dated 04/07/2011, clarified that, "a notification of CDM prior consideration is not required for a PoA, since it can not have a start date prior to the initial publication of the PoA-DD for public comments" (Ref /16/). The validation team also referred the Clean Development Mechanism standard, EB 65, annex. 5, ver 01.0, para 29 which states that the requirements in paragraphs 26 - 28 do not apply to CDM PoAs Hence, from the above description, the validation team agrees that prior consideration in the proposed PoA is not necessary. However, during the validation activity, the UNFCCC has published EB 70, Annex 3, this states in para 194 as "The DOE shall assess prior consideration of the CDM for the PoAs, applying the provisions of paragraph 107 above mutatis mutandis.. The Para 107 states "For a project activity with a start date on or after 2 August 2008, for which a PDD has not been published for global stakeholder consultation or a new methodology has not been proposed to the Board before the project activity start date, the DOE shall confirm by referring to the list of prior consideration notifications from the UNFCCC website and communication between the project proponent, the secretariat and the host Party DNA regarding the commencement of a new project activity.¹¹ If such notification has not been provided by the project participants within 180 days of the project activity start date, the DOE shall determine that the CDM was not seriously considered in the decision to implement the project activity." Accordingly, the validation team checked that the start date of the PoA i.e. web hosting of the PoA is 13/06/2012 and first real case CPA start date is on 30/12/2012 (expected), which is later than PoA start date. Hence, validation team confirms the prior consideration.

Historical Information on project timeline:

There is no historical information on the project activity timeline on CDM validation except baseline survey conducted by the CME who is also the CPA implementer. The baseline survey and demonstration of the water purification equipment as described above has taken place. However, project time line in accordance with CDM would happen only after real action that would happen in CPAs.

Identification of alternatives (113-116)

The methodology AMS III AV version prescribes "It is assumed that fossil fuel or non renewable biomass to boil water as a means of purification of water for drinking purposes". This was further observed during the site visit by the validation team during the site visit. No more alternatives are required to be identified; this is in line with methodology.



Since, the applied baseline and monitoring methodology prescribes the baselines scenario, the validation team confirms that no further identification of alternatives is required as per paragraph 115 of VVS version 1.2.

3.11.1 Start date of the PoA/CPA(193)

As described above the start date of the PoA is 13/06/2012. The CPA start date would be 30/12/2012 or as per the registration date of the PoA with the UNFCCC.

The eligibility criteria of the start date for inclusion of CPA has been set as following:

.For each CPA

- a) The start date will be earliest of the date of
 - Purchase order for the purification systems/water purifiers project
- b) Start date is after the commencement of validation of PoA i.e. starting date of PoA.

This will be checked before inclusion of each CPA, into this PoA.

Bureau Veritas Certification confirms that the start date of any CPA is not prior to the commencement of the validation of the PoA, which is the date of the CDM-PoA-DD is first published for global stakeholder consultation.

3.11.2 Demonstration of additionality of the PoA as a whole

The proposed CDM PoA is a micro scale Programme of Activities. Accordingly, in line with the EB 68, Annex 26, Para 4, the emission reduction in each individual CPA would be less than 20 ktCO₂ per year. Also, as per para 4 (b) it would be demonstrated in the CPA that, each of the independent subsystems/measures in the project annually saves <=600 tons and end users of the subsystems or measures are households/ communities/SME. This is also described in the applicability condition of the the PoA-DD and is included as a required condition described in the “eligibility criteria” in Section B.2 of the PoA DD.

It has been described in the PoA DD, Section B.1 that the project participant would demonstrate the additionality of the project at the CPA level, as per “Guidelines for demonstrating additionality of micro-scale project activities, version 04- EB 68, Annex 26.

It is also described in the PoA DD in section B.1 that as per paragraph 04, Annex 26 of the EB 60 meeting report “full additionality assessment is not



required in the context of component project activities (CPA), rather the confirmation of additionality for CPAs should be conducted by means of the eligibility criteria. However PP chooses to demonstrate additionality at CPA level.

The validation team accepts this as demonstration of additionality can be at a PoA level or at CPA level. Hence the additionality would be demonstrated in each CPA that the proposed activity would not be implemented in the absence of the PoA

Accordingly, in the first real case CPA, the PP has demonstrated additionality by means of micro-scale guideline as per EB 68, Annex 26. This is validated in CPA validation report.

Sensitivity Analysis:

Since the additionality demonstration is at individual CPA level, the sensitivity analysis is not required, as the additionality is not demonstrated by means of investment analysis. Instead, micro scale guide lines are used as described above.

3.11.3 Common practice analysis (121)

Common practice analysis has not been used to demonstrate additionality, as this being a micro scale programme of activity. The validation team accepts that there is no need of common practice analysis in the small scale PoA, hence acceptable.

Bureau Veritas Certification confirms that none of the implemented CPA would occur in the absence of CDM.

3.12 Monitoring plan (198)

The validation team hereby confirms that the monitoring plan complies with the requirements of the methodology.

The steps taken to assess whether the monitoring arrangements described in the monitoring plan are feasible within the programme design are described below.

The PoA DD in Section B.7.1 describes the parameters to be monitored in the POA and B.7.2 describes the monitoring plan and how it would be implemented.

Accordingly, following parameters has to be monitored in each SSC CPA.

- QPW_y – Quantity of purified water in year y
- $N_{p,y}$ – Number of functional project appliances



- f_{NRB} – Fraction of woody biomass used in the absence of project activity
- Existence of public distribution network in the project region
- The PoA has applied, case 2, hence, following is also required to be monitored:
 - Proportion of total population for which the common practice of water boiling is or would have been water boiling
 - q_y - Average volume of drinking water per person per day
 - Number of person supplied with purified water from each of functional project appliances
- Water quality
- F_y - Fossil fuel consumption in year y
- E_y - Electricity consumption in year y
- By – Quantity of woody biomass that is substituted or displaced in tones

Methodology requirements and how PoA meets with:

Following are the methodology requirements. How the proposed PoA follows this is explained below this.

In accordance with para 11 of AMS III AV version 2, the Monitoring shall consist of checking of all appliances or a representative sample thereof, atleast once every two years (biennial) to ensure that they are still operating ($N_{P,y}$) or are replaced by an equivalent in service appliance as per the relevant sampling requirements of AMS-I.E. The CME implementer has proposed to do sampling annually for this parameter, hence, this is meeting with the requirement.

In accordance with para 12 of AMS III.AV version 2, the quantity of purified water in year y QPW_y would be monitored as per the following options:

- (a) On continuous basis or a representative sample thereof;
- (b) Derived from the capacity of the equipment established by manufacturers' specifications and the number of functional project appliances.

The CME implementer has proposed to do sampling annually for this parameter; hence, this is meeting with the requirement.

In accordance with para 13 of AMS III.AV Monitoring shall include annual check if a public distribution network is installed, and if any public distribution system is found out, emission reduction for those number of water purification system would not be claimed, hence, acceptable.

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In accordance with para 14 of AMS III.AV For Case 2 in paragraph 4 (b), as indicated in equation (1), an *ex ante* survey would be carried out to establish:

- (a) The proportion of total population for which the common practice of water boiling is or would have been water boiling;
- (b) Average volume of drinking water per person per day(q_y) based on baseline campaign (survey with 90/10 confidence/precision level) subject to a cap of 5.5 litres per person per day.

The CME implementer has proposed to do sampling annually for this parameter, hence, this is meeting with the requirement.

In accordance with para 15 of AMS III.AV for case in paragraph 4 (b), survey is done at least once every two years (biennial) to check the number of persons supplied with purified water from each of the functional project appliances.

The CME implementer has proposed to do sampling annually for this parameter, hence, this is meeting with the requirement.

In accordance with para 16 of AMS III.AV the water quality monitoring on sample basis as per paragraph 3 (b) which states that "It shall be demonstrated that the application of the project technology/equipment achieves compliance with "protective" * performance target as per .Evaluating household water treatment options: Health based targets and microbiological performance specifications. (WHO, 2011) or a comparable National standard or guideline".

The proposed PoA would follow guidelines of National Standard IS 10500:2012, May 2012 "Standard for Drinking Water" hence, this is meeting with the requirement.

In accordance with para 17 of AMS III.AV The total fuel and electricity consumption in year y shall be monitored as per the relevant provisions of the tool .For the emission reduction calculation, "Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion. and the "Tool to calculate baseline, project and/or leakage emissions from electricity consumption respectively". This would be followed in those CPAs, where use of fuel and/or electricity is done, hence, meets with the requirement.

In accordance with para 18 of AMS III.AV, The use of this methodology in a project of activity under a programme of activities is legitimate if the

* Protective default performance target is defined by a 2 log₁₀ reduction of bacteria, a 3 log₁₀ reduction of viruses and a 2 log₁₀ reduction of protozoa (.protective.). The reference pathogens shall be C. Jejuni, Cryptosporidium, and rotavirus.



leakage is estimated and accounted for as per the relevant provisions of AMS-I.E under the section for Programme of Activities. As per methodology AMS I E version 5, B_y is multiplied by a net to gross adjustment factor of 0.95 to account for leakages, in which case surveys are not required, hence, this para condition is met with.

As described in the PoA –DD, the non-renewable biomass factor, $f_{NRB,y}$, will be assessed for each verification period as per the guidelines of paragraphs 7, 8 of AMS-I.E. Version 05, hence, this is acceptable. The actual assessment is demonstrated in the first real case CPA.

Sampling:

For the sampling, the approved methodology, AMS-III.AV Version 02, refers AMS I E. The PP has used latest version of AMS I E version 5. This requires statistically valid sampling to be performed during monitoring. The PP has accordingly decided that same would be through a statistically valid sample as explained below.

- ➔ For biennial monitoring (if used), parameters determined through representative sampling will satisfy the 95 per cent confidence interval and 10 per cent margin of error requirement.
- ➔ For annual sampling (if used) the requirements are 90 per cent confidence interval and a less than a 10 per cent margin of error.
- ➔ In cases where the 95/10 or 90/10 precision is not achieved then the the lower bound of the 95 or 90 per cent confidence interval will be chosen if the representative sampling is not repeated.

In the proposed PoA, the sampling would be as specified by the “*Standard for sampling and surveys for CDM project activities and programme of activities*”, version 03.0, Annex 4, EB 69 and ‘Guidelines for sampling and surveys for CDM project activities and Programme of activities’ Annex 5 EB 69, ver 02.0.

As described in the PoA DD and meeting with methodology para 11 to 18, annual sampling would be carried out for No. of water purification system operational in CPA ($N_{P,y}$), Quantity of purified water in year y (QPW_y), Average volume of drinking water per person per day (q_y), Fossil fuel consumed (F_y) & electricity consumption by project activity (E_y) based on annual survey conducted with 90/10 confidence/precision level, Determination of water quality (final output) can be done by means of monitoring the replacement of ‘cartridges’ based on the annual survey data as explained above. Since, ‘cartridge’ is the only significant part on which purification of water and hence the final output is dependent, the

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PP would ensure that the quality of cartridges replaced are capable of providing water quality as required by the National Standard; prevalent at the time of implementation of the CPA. This will be performed for each CPA. Since the PP would carry out this procedure, using standard techniques of sampling as described above and illustration of sampling as explained below, validation team finds this as conservative and confirms that it gives more confidence in overall sampling process.

As described in the PoA-DD, the sample method will be a simple random sample. The validation team finds this appropriate, since the users of water purification systems would adopt same pattern of usage and are using the water boiling system with the inefficient cook stove for the uniform application of achieving safe drinking water. Hence, the Validation team confirms that the population using water purification system is homogeneous. The sampling would be done in the households/communities where water purification system(s) are distributed.

Following parameters are calculated based on annual sample survey for CPA(s). This is done for calculation of NRB i.e. Non-renewable biomass factor. This is worked out based on the national level, state level and district level data available and based on the survey carried out for each CPA.

Parameter	Description
B _y	<p>Quantity of woody biomass; which otherwise would have been used in the baseline. The same is estimated as per Para 6 (a) of the approved methodology AMS I E, version 5, as directed by the methodology AMS III AV version 2. The methodology AMS I E Para 6 (a) states "By is determined by using one of the following options: (a) Calculated as the product of the number of appliances multiplied by the estimate of average annual consumption of woody biomass per appliance (tonnes/year); This can be derived from historical data or estimated using survey methods; ". Accordingly, the PP has used the survey method to determine the quantity of B_y, which is acceptable by the validation team.</p> <p>To arrive at the value of B_y, in the survey method it has sourced the value of quantity of woody biomass consumed for total consumption in the house hold and based on the historical data published by national statistics using authentic government sources and studies which use remote-sensing data and survey of</p>

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	<p>local usage. The analysis for deciding quantity of woody biomass which otherwise would have been used in the baseline is carried out by Prof. A. P. Patil, Head, Department of Statistics, B. N. Bandodkar college of Science, Thane – 400 601.* This survey and analysis being done under the guidance of third party, qualified, academic person, the validation team has accepted the survey results for the first real case CPA. (Ref /16/). For the first real case, the PP has used national level data, district level data and conservative of that is used in the calculation of B_y.</p> <p>➔ This is a Parameter to be monitored and would be the result of survey data and its calculations for each CPA.</p>
DRB	Demonstrably renewable biomass, monitored and calculated parameter from the national statistics using authentic government sources and studies which use remote-sensing data and survey of local usage carried out.
NRB	Calculated value from B_y and DRB $NRB = B_y - DRB$

Explanation on NRB calculation is as under :

As described in the PoA-DD, the parameter, the non-renewable biomass factor, $f_{NRB,y}$, will be assessed in each CPA for each verification period as per para 8 of AMS I.E.

$$f_{NRB,y} = \frac{NRB}{NRB + DRB}$$

Demonstrably Woody biomass (DRB):

Calculation of DRB is done by option I of para 7 of AMS I.E

Woody[†] biomass is “renewable” if following conditions is satisfied:

1. The woody biomass is originating from land areas that are forests[‡] where:
 - a) The land area remains a forest; and

* Baseline survey report on prevailing fuel consumption for cooking purpose in Thane District, Maharashtra.

[†] In cases of charcoal produced from woody biomass, the demonstration of renewability shall be done for the areas where the woody biomass is sourced.

[‡] The forest definitions as established by the country in accordance with the decisions 11/CP.7 and 19/CP.9 should apply.



- b) Sustainable management practices are undertaken on these land areas to ensure, in particular, that the level of carbon stocks on these land areas does not systematically decrease over time (carbon stocks may temporarily decrease due to harvesting); and
- c) Any national or regional forestry and nature conservation regulations are complied with.

This will be conservatively considered based on available national or regional data from survey results, national or local statistics, studies, maps and other source of information.

Non-renewable biomass (NRB):

NRB will be determined as per para 7 of AMS I.E. Non-renewable woody biomass (*NRB*) is the quantity of woody biomass used in the absence of the project activity (*By*) minus the *DRB* component, as long as at least two of the following supporting indicators are shown to exist:

- A trend showing an increase in time spent or distance travelled for gathering fuel wood, by users (or fuel-wood suppliers) or alternatively, a trend showing an increase in the distance the fuel-wood is transported to the project area;
- Survey results, national or local statistics, studies, maps or other sources of information, such as remote-sensing data, that show that carbon stocks are depleting in the project area;
- Increasing trends in fuel wood prices indicating a scarcity of fuel-wood;
- Trends in the types of cooking fuel collected by users that indicate a scarcity of woody biomass.

The determination of NRB will be done at CPA level showing that any two supporting indicators mentioned above exists.

Sample size:

The determination of sample size will be done manually or by means of software in line with EB 69, Annex 4. This is done in line with the using statistical software as recommended in "Standard for sampling and surveys for CDM project activities and programme of activities", version 03.0, Annex 4, EB 69 and "Guidelines for sampling & surveys for CDM project activities and programme of activities, version 02.0, Annex 5, EB 69. The validation team checked the explanation for deciding number of samples for the whole population and finds this correct.

The Validation team referred EB 65, annex 2, "Standard for sampling and surveys for CDM project activities and programme of activities", which is reproduced below:



Para 11: When developing a sampling plan, project proponents shall calculate the sample size required to achieve a required level of reliability. The sample size should be determined manually or using appropriate statistical software. The calculation is dependent on all of the following as well as the target level of confidence and the precision (e.g. 90/10 or 95/10):

(a) The type of parameter of interest, i.e. mean value or proportion value; The parameter of interest here considered is 'Proportion value' and not the mean value. Further, the 'Guidelines for sampling & surveys for CDM project activities and programme of activities', version 02.0, Annex 5, EB 69" in which Para 48 states "...[..]..Regardless of the sampling scheme used, the following have to be pre-determined in order to estimated the sample size : a) The value that the proportion is expected to take; b) The level of precision, and confidence in that precision (90/10 for all small-scale examples)."

The Para 49 further explains by giving the illustration/example that *"For all of the cook stove examples below, the proportion of interest is the number of project cook stoves that are still in operation at the end of the third year after the stoves were distributed; it is thought that this proportion is 0.5 (50%)."* Accordingly, in the present PoA the project participant has expected the proportion as 0.5 (50%). This is because a proportion of 0.5 indicates the maximum variability in a population, and is often used in determining a more conservative sample size, that is, the sample size may be larger than if the true variability of the population attribute were used.* In order to confirm the appropriateness in the 'sampling size'; considered by the PP, the validation team referred another source apart from EB guidelines. The validation team accepts the source as credible as "The Institute of Food and Agricultural Sciences (IFAS") is a third party, independent organization involved in academic activities, working under the aegis of U.S. Department of Agriculture, Cooperative Extension Service, University of Florida, IFAS, Florida A. & M, hence, found credible source of information for cross checking.

Again Referring Para 49 it states that "the proportional parameter of interest of the cook stoves is the number of project cook stoves that are still in operation..." and further referring Para 50 which advocates use of the equation 1 for homogeneous population which is the scenario in the proposed PoA.

As described in the methodology, the desired precision for all parameters is 90/10 if monitoring is done annually. The parameter with the largest variance will determine the minimum sample size.

* <http://edis.ifas.ufl.edu/pd006>

refer Para "Degree of Variability"



The PP wishes to do annual sampling and survey, as per, 90/10 precision which is acceptable as per EB 69, Annex 4. The illustration of the sampling is as under.

In the first real case CPA, for the 500 numbers of water purification system as per sampling guidelines of EB 69, Annex 5, Para 50, equation 1 formulae are calculated as follows.

$$n \geq \frac{(1.645)^2 \times N \times p(1-p)}{(N-1) \times (0.1)^2 \times p^2 + (1.645)^2 \times p(1-p)}$$

Where:

- n = Sample size
- N = Total number of households (one water purification system for each household = 500)
- p = expected proportion (0.50)
- 1.645 = Represents the 90% confidence required
- 0.1 = Represents the 10% relative precision (0.1x0.5 = 0.05 = 5% points either side of p)

Substituting the values here, as described above, it gives the total number of samples = 176, which is approximately. 35.2%. In addition, in the above case, the PP has explained that if by chance 10% of the respondents do not reply, then scaling up of sample size would be carried out. This gives sample size as 195 for 90/10 respectively.

Hence, from the above description and after reviewing the project description validation team confirms that due to large number of water purification system having similar characteristics and use of similar patterns in the CPAs, the approach of 'sampling' to represent total population is correct. Also the method used for sampling is as per the guideline provided by UNFCCC, for 'sampling' in EB 50, Annex 30 and EB 69, Annex 5, hence this is acceptable.

CAR-21, and CAR-64 were raised as in the PoA-DD, sampling criteria was not in accordance with EB 55, Annex 38 and EB 67, Annex 06, CAR-46 was raised as in the section B.2 of part II, the general description of sampling plan was not provided, CAR-64 was raised as in Part II, Section B.7.2, the sampling plan was not described in accordance with the AMS III AV and EB 67, Annex 30. In response to this, the CME corrected the sampling plan, procedure and provided an illustration in line with EB 67, Annex 6. The validation team reviewed this and found it appropriate, hence, closed the CARs.



From the above description; the validation team is of the opinion that the project participant is capable of implementing the monitoring plan in the context of the project activity. The validation team hereby confirms that the monitoring plan described in the revised PoA-DD complies with the requirements of the methodology.

Data Archiving and Uncertainty:

The data collected during the monitoring and baseline justification for all the parameters would be archived for entire lifetime of PoA (28+2years) and the database would be maintained by CME. This data will be used to calculate the emission reduction of the project. The uncertainty in any data will be corrected by applying the alternate correction factor depending on the parameters.

CAR 63 was raised as although monitoring plan was in accordance with the methodology AMS III AV, however, data uncertainty and data archiving procedures are not mentioned. The CME described about the data uncertainty and data archiving procedures, hence, validation team closed the CAR.

Implementation:

Staff/third party agency appointed by the CPA Implementer would conduct the sampling and determine the various monitoring parameters in individual CPAs.

The validation team hereby confirms that the monitoring plan complies with the requirements of the methodology(ies).

The steps taken to assess whether the monitoring arrangements described in the monitoring plan are feasible within the programme design.

3.13 Environmental impacts (199)

As per the Schedule of the EIA notification (Ref /B5/), given by the Ministry of Environment and Forests (Government of India) EIA is not a regulatory requirement in India for similar type of projects. Thus, the project activity doesn't require EIA. The project activity does not involve any negative environmental impacts, as it involves the installation of low green house gas emitting water purification systems, where it is assumed that fossil fuel or non-renewable biomass (NRB) is used to boil water as means of water purification in the absence of the project activity.

Project participant has obtained HCA approval (Ref /7/) from the DNA and it is confirmed by the Authority that the project contributes to sustainable



development in the respective regions. The project activity is in compliance with all current applicable legislations.

3.14 Local stakeholder consultation (201)

The steps taken to assess the adequacy of the local stakeholder consultation are described below.

As described in the PoA-DD in Section F.1; since the local stakeholder concerns may vary for every CPA hence, consultation of stake holder would be conducted at CPA level. Looking to the project activity and its equipment i.e. use of water purification system at local level; validation team agrees to this.

In addition to the stakeholder consultation at CPA level, the PP has carried out initial level stakeholder consultation. The PoA DD was made publicly available through PP's website on 25th January 2012. The feedback was received over the 30 days duration when the project details were displayed on website. The stake holder consultation comments are described in the Section F.2. The validation team reviewed the website contents and the feedbacks through Email and confirms that there are no negative comments during this period. T

CAR-17 was raised as the local stakeholder consultation conditions were not clearly described in the Section B.2 of the webhosted SSC-PoA-DD. In response to this, the CME explained that that local stakeholder consultation will be conducted at CPA level and describes the conditions for local stakeholder consultation in accordance with paragraph 14 g of EB 65 annex 3 having reviewed this, the Validation team accepts the correction and CAR is closed.

The local stake holder consultation meeting was held for the first real case CPA at Doryachapada in Heevandad village, Shahapur taluk, Thane district, Maharashtra on 04/10/2011. However, since this being PoA, a nationwide programme, the PP also sought opinion/review from other institutes/organizations. Hence, the PP has sent emails/letters and comments were invited on PP's website for one month starting from 25th January 2012. Validation team reviewed this and finds appropriate, as it is in addition to local stake holder at CPA level. Also, there is no negative comment identified, hence, closed this point.

From the above description and various CARs/CLs raised by validation team and having reviewed PP's response and corrections in the PoA-DD, the validation team hereby confirms that the process of local stakeholder consultation is observed to be adequate.



4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

The PoA-DD using methodology AMS III AV version 02 was webhosted on the UNFCCC for global stakeholder's comments as per CDM requirements. The programme was webhosted from 13 Jun 12 - 12 Jul 12. No comments were received during this period.

5 VALIDATION OPINION

Bureau Veritas Certification has performed a validation of the Water Purifiers programme in India in India. The validation was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The validation consisted of the following three phases: i) a desk review of the design and the baseline and monitoring plan; ii) follow-up interviews with stakeholders; iii) the resolution of outstanding issues and the issuance of the final validation report and opinion.

By reviewing VVS, PS, Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, "and, sampling standard" etc, Bureau Veritas Certification is of the opinion that management system of CME is robust and efficient to ensure eligibility and quality of CPAs. Eligibility criteria are sufficient so that the inclusion of CPAs could fulfill all requirements of EB rules. Emission reductions attributable to the CPA under the PoA are additional to any that would occur in the absence of the PoA, and hence are likely to be achieved.

The review of the PoA-DD (version 4) and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the PoA correctly applies and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria. Bureau Veritas Certification concludes Water Purifiers programme in India meets all stated criteria and thus requests registration of Water Purifiers programme in India as PoA.

6 REFERENCES

/1/	Web hosted PoA DD version 1.4 dated 08/06/2012
/2/	Web hosted CPA DD version 1.4 dated 08/06/2012
/3/	Final revised PoA DD dated 19/12/2012 version 4
/4/	Final CPA DD dated 19/12/2012 version 4
/5/	Letter of Approval (Host country Approval) provided by the Host Country DNA, i.e. India vide reference no.4/15/2012-CCC dated 22/11/2012
/6/	Modalities of Communications (MoC) statement provided by the CME
/7/	Indian National Standard, IS – 10500: 2012 “Drinking Water – specification – Second Revision, May 2012
/8/	“Registration Certificate of Establishment” issued by the Office of the Inspector, Bombay Shops and Establishment Act, 1948 vide certificate no. 760115109/COMMERCIAL II, Ward A, dated 7/11/2009
/9/	“Certificate of Incorporation” issued by the Assistant Registrar of Companies, Maharashtra, in the name of General Carbon Advisory Services Pvt. Ltd. vide Corporate Identity Number : U74140MH2009PTC196260 dated 06/10/2009
/10/	Test report for the pre-project water quality vide its report reference no. TH/PM/10/12/462
/11/	Specimen signature, employment status of the personnel who signed the MoC statement (passport and employment record)
/12/	Email dated 14/02/2012, from UNFCCC to the PP, clarifying that no investment is sought before the registration of PoA.
/13/	Undertaking from the CME (implementer of first real case CPA) stating “ <i>the CPA investment would be financed through its own sources and there is no ODA involved into</i> ”
/14/	Emission reduction sheet for the first real case CPA
/15/	Statistical Analysis Report for “Water Purifiers Programme” in Shahapur taluk in Thane district of Maharashtra for the first CPA for Quantity of woody biomass which otherwise would have been used in the baseline, and use of quantity of biomass in the first CPA area for water purification and cooking purpose carried out by Prof. A. P. Patil, Head, Department of Statistics, B. N. Bhandodkar college of Science, Thane – 400 601. The survey report on prevailing methods for purification purposed in Lahe, Raas, Doryachapada villages of Shahapur taluk of Thane District



/16/	UNFCCC E-mail dated 04/07/2011, clarifying that, <i>“a notification of CDM prior consideration is not required for a PoA, since it can not have a start date prior to the initial publication of the PoA-DD for public comments”</i> .
/17/	Certificate provided by the manufacturer of the water purifier; M/s. “Hindustan Unilever” which states that capacity of providing safe drinking water of this system as 14 Litres/day. It also states that it can provide equipment which can have a safe drinking water providing capacity even up to 22 liter per day, if asked for.
/18/	Schedule of the EIA notification (Ref /18/), issued by the Ministry of Environment and Forests (Government of India) stating that EIA is not a regulatory requirement in India for similar type of projects. (http://www.envfor.nic.in/legis/eia/so1533.pdf).
/19/	Web site contents of CPA implementer for local stake holders and email feedbacks thereof.
/20/	The information notice for stakeholder consultation in local news paper ‘Gavkari’ on date 19/09/2011
/21/	Minutes of meeting of Local stake holder consultation dated 04/10/2011
/22/	Personal invitation letter for Local stake holder consultation received by 22/09/2011

Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents.

/B1/	Validation and Verification Standard (version 2
/B2/	Form of Modalities of Communication statement. (F-CDM-MOC)
/B3/	Approved methodology titled “Low greenhouse gas emitting water purification systems” AMS III AV version 02
/B4/	Guidelines for demonstrating additionality of microscale project activities, Version 01, EB 68, Annex 26
/B5/	Standard for Demonstration of Additionality, Development of Eligibility criteria and application of multiple methodologies for Programme of Activities - EB 65, Annex 3
/B6/	Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities, Version 4.1 - EB 55, Annex 38
/B7/	Clean Development Mechanism Project Standard (version 01.0)
/B8/	“Switch from non-renewable biomass for thermal applications by



	the user” - AMS I E version 5.
/B9/	Standard for sampling and surveys for CDM project activities and programme of activities”, version 03.0 - EB 69, Annex 4
/B10/	Guidelines for sampling and surveys for CDM project activities and programme of activities, version 02 - EB 69 Annex 5
/B11/	General guidelines ¹ for sampling and surveys for small-scale cdm project activities (version 01), EB 50, Annex 30
/B12/	Standard for sampling and surveys for CDM project activities and programme of activities (Version 02.0) - EB 65, Annex 2
/B13/	Standard for application of the global warming potentials to clean development mechanism project activities and programmes of activities for the second commitment period of the kyoto protocol (version 01.0), EB 69, annex 3
/B14/	“General Guidelines to SSC CDM methodologies”, version 17- EB 61, Annex 21
/B15/	“Guidance for determining the occurrence of debundling under a PoA” - EB 54 Annex 13, version 03
/B16/	Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion version 1, EB 39, Annex 7
/B17/	Tool to calculate project or leakage CO ₂ emission from fossil fuel combustion, version 2, EB 41, Annex 11.

**Persons interviewed:**

List persons interviewed during the validation or persons that contributed with other information that are not included in the documents listed above.

/1/	Mr. Rambabu, Director, General Carbon Advisory Services Pvt. Ltd.
/2/	Ms. Betsy Vincent, Vice President, General Carbon Advisory Services Pvt. Ltd.
/3/	Mr. Hari Prasad, CDM Analyst, General Carbon Advisory Services Pvt. Ltd.
/4/	Ms. Sanaya Dotiwala, General Carbon Advisory Services Pvt. Ltd.
/5/	Ms. Sangeeta Bhaskar Jadhav – Local stake holder
/6/	Ms. Meena Baliram Jadhav– Local stake holder
/7/	Ms. Aruna Jadhav– Local stake holder
/8/	Ms. Kamlabai Ramesh Gayakwad– Local stake holder
/9/	Ms. Sapna Santosh Gayakwad– Local stake holder
/10/	Ms. Geeta Gayakwad– Local stake holder
/11/	Ms. Shobha Vijay Jagtap– Local stake holder
/12/	Ms. Yashodabai Madhukar Bhoite– Local stake holder
/13/	Ms. Sindhu Bhimrao– Local stake holder
/14/	Ms. Surekha Vagh– Local stake holder
/15/	M/s. Suman Hari Dive– Local stake holder
/16/	M/s. Pushpa Suresh Dahahde– Local stake holder
/17/	Ms. Sangeeta Prakash– Local stake holder
/18/	Ms. Vishakha Bhandage– Local stake holder
/19/	Ms. Nieta Thakre – Volunteer, NGO
/20/	Ms. Meena Vegere - Volunteer, NGO



7 CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS

Hitesh Karandikar (Team Leader)

Hitesh Karandikar is B.E. (Bachelor of Engineer) in Electrical Engineering. (1991 batch). He is an MBA in Marketing and Finance. He has worked in Gujarat Electricity Board of Gujarat state in various departments. He has worked at world renowned Hydro Power project viz. "Sardar Sarovar Narmada Nigam Limited". The power station has total capacity of 1450 MW generation capacity of which 250 MW from Canal Head Power House and 1200 MW from River Bed Power House. He has an experience of Designing switch Yard Structures, foundation for the 220 kv and 400 kv switchyard structures.

He is a certified Energy Manager from Bureau of Energy Efficiency, and has wide experience of preliminary energy audit of more than 200 industries. He was also a team mate from Gujarat Electricity Board, in carrying out thermal power energy audit carried out by NPC, Hyderabad and ERDA, Vadodara. He has been faculty in many "Energy Conservation" seminars/conferences. His other professional qualification includes: He is a ISO 9001, 14001 and OHSAS 18001 Lead Auditor. (more than 200 manday audit experience). He is also a certified Six Sigma Black Belt. He has successfully undergone training of CDM verifier organised by Bureau Veritas.

Vishwanath Sule (Team Member)

Bureau Veritas Certification Pvt. Ltd. Verifier Climate Change

A Mechanical Engineering with four year work experience in climate change services India. He has previously worked carbon advisory firm in India on CDM project development, CDM project due diligence and Execution of CDM projects. He has undergone training on Clean Development Mechanism and involved in the Validation and verification of CDM/VCS projects.

Sanjay Patankar (Internal Technical Reviewer)

Bureau Veritas Certification Lead Verifier- Climate Change

Educational qualifications: B.E. (Mech.) M.E. (Mech.)

He has over 20 years of experience in engineering manufacturing industry covering various functions like enterprise management, product design, engineering, tool & die design, improvements in the production shop, quality assurance & control and systems planning and implementation, including ISO 9001 based quality management systems. Working for the last 4^{1/2} years in Bureau Veritas Certification (India) Private Ltd. as Lead Auditor for ISO 9001, 14001 and OHSAS 18001 standards/specifications.



Has undergone training related to Clean Development Mechanism and is currently involved in validation and verification of CDM project activities

H B Muralidhar (Support Technical Reviewer)

Graduate in Electrical engineering with 25 years of experience power generation and distribution related fields as well as in management system auditing. He is the Lead auditor for Environmental Management System, Quality Management system and Occupational Health and Safety Management System. He has undergone intensive training on Clean Development Mechanism. He is the technical expert & conducted Validation / Verification for more than 50 CDM Projects.



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APPENDIX A: PROGRAMME OF ACTIVITIES VALIDATION PROTOCOL (VERSION 1) FOR METHODOLOGY AMS III AV VERSION 2

TABLE 1 GENERAL REQUIREMENT PROTOCOL FOR POA

Validation requirements based on VVS version 02.0 (EB 65 Annex 4), PS version 01.0 (EB 65 Annex 5), PCP version 02.0 (EB 66 Annex 64), PoA Standard version 01.0 (EB 65 Annex 3) and Guidelines for completing the SSC-PoA-DD form version 02.0 (EB 67 Annex 30)

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Part I Programme of activities (PoA)					
A General description of PoA					
A.1 Title of the PoA					
A.1.1 Is the title of the proposed PoA provided?	DD PS	31	Yes POA has been Titled as Water Purifiers Programme in India	OK	OK
A.1.2 Is the current version number of the SSC-PoA-DD indicated?	DD		The current version of the SSC-POA-DD is mentioned as Version 1.4	OK	OK
A.1.3 Is the completion date of the SSC-PoA-DD provided in DD/MM/YYYY format?	DD		Yes the date of the SSC-PoA-DD completion is provided as 08/06/2012	OK	OK
A.2 Purpose and general description of the PoA					
A.2.1 Is policy/measure or stated goal that the PoA seeks to promote described?	DD PS	139	The policy/measure of the POA is not clearly described in the A.2 section of the	CAR 01	--



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			webhosted SSC-PoA-DD.		
A.2.2 Is a framework developed for the implementation of the proposed PoA and inclusion of CPAs under the PoA?	DD PS	138	The framework developed by the CME for the implementation of PoA and inclusion of CPA's in the PoA is not described correctly in the A.2 section of webhosted SSC-PoA-DD.	CAR 02	--
A.2.3 Is it confirmed that the proposed PoA is a voluntary action by the coordinating/managing entity?	DD PS	140	The Co-coordinating / Managing entity has not justified that the POA is voluntary action with documentary evidences	CAR 03	--
A.2.4 Is it explained how the PoA will reduce GHG emissions or increase GHG removals?	PS	31	The section A.2 webhosted SSC-PoA-DD does not describe how the PoA will result in emission reductions of GHG	CAR 04	--
A.2.5 Are sectoral scope(s) and type of the PoA indicated?	PS	31	Yes	OK	OK
A.2.6 Is the contribution of PoA to sustainable development explained?	DD PS	31	The contribution of sustainable development is not correctly described in accordance with the indicators stipulated by the host country (NCDMA and MoEF) India	CAR 05	--
A.3 CMEs and participants of PoA					
A.3.1 Is CME of the PoA identified, as the entity which communicates with the Board?	DD PS	141	The "General Carbon Advisory Services Pvt ltd " has been identified as the CME for the PoA	OK	OK
A.3.2 Are project participants to the PoA indicated?	DD PS	141	The "General Carbon Advisory Services Pvt ltd " has been identified as the project participant for the PoA	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
A.4 Party(ies)					
A.4.1 Are Party(ies) and CMEs involved in the proposed PoA listed in the table?	DD PS	141	The CME identified in the A.4 section of webhosted SSC-PoA-DD is not consistent with the appendix 1	CAR 06	--
A.4.2 Is contact information on entity/individual responsible for the PoA provided in Appendix 1?	DD		The CME identified in the A.4 section of webhosted SSC-PoA-DD is not consistent with the appendix 1	(CAR 06)	--
A.5 Physical/Geographical boundary of the PoA					
A.5.1 Are details of the defined boundary of the PoA provided, in terms of a geographical area(e.g., municipality, region within a country, country or several countries) within which all CPAs included in the PoA will be implemented?	DD PS	142	The boundary for the PoA has been defined as the host country India	OK	OK
A.5.2 In establishing the boundary, if the project participants have taken into consideration all applicable national and/or sectoral policies and regulations within that chosen boundary?	VVS PS	192 142	Yes it is mentioned in the A.5 section of SSC-PoA-DD that PoA will follow all the applicable national /sectoral policies and regulations of host country India	OK	OK
A.6 Technologies/measures					
A.6.1 Are the technologies and/or measures to be employed and/or implemented by the CPAs in the PoA described, to enable the identification of the project's scale and type, demonstration of additionality, application of the selected methodology and calculations of GHG emission reductions or net GHG removals?	DD PS	147	The technology measures mentioned in the A.6 of the SSC-PoA-DD are not correctly described.	CAR 07	--



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
A.6.2 For the description, where relevant, are applicable provisions for application of selected baseline and monitoring methodology for small-scale project activities in the Project standard considered?	DD		The CME of the PoA has not justified how the each technology measure described in the A.6 of webhosted SSC-PoA-DD are applicable under the applied methodology AMS III AV	CAR 08	--
A.6.3 Are the technologies to be employed by the CPAs in the PoA described including a description of how environmentally safe and sound technology(ies) applied in the CPAs and know-how to be used are transferred to the host Party(ies)?	PS	31	The CME of the PoA has not justified how the each technology measure described in the A.6 of webhosted SSC-PoA-DD is environmentally safe and sound	CAR 09	--
A.7 Public funding of PoA					
A.7.1 Is it indicated whether the PoA receives public funding from Parties included in Annex I?	DD		In the section A.7 of webhosted SSC-PoA-DD it is mentioned that "The PoA will not receive any public funding from Parties included in Annex I"	OK	OK
A.7.2 In case where public funding from Annex I Parties is involved, are followings provided? (a) Information on Parties providing public funding (b) Attached in Appendix 2: the affirmation obtained from such Parties that such funding does not result in a diversion of official development assistance, is separate from, and is not counted towards the financial obligations of those Parties	DD PS	34	Not applicable as no funding from annex 1 parties is involved	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B Demonstration of additionality and development of eligibility criteria					
B.1 Demonstration of additionality for PoA					
B.1.1 Is it described that how in the absence of CDM, none of the implemented CPAs would occur?	DD PoA- Stand	7	The B.1 section of webhosted SSC-PoA-DD does not describe the demonstration of additionality of PoA in accordance with EB55 Annex38	CAR 10	--
B.2 Eligibility criteria for inclusion of a CPA in the PoA					
B.2.1 Do the eligibility criteria cover the geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA?	PoA- Stand	14(a)	The B.2 section of webhosted SSC-PoA-DD mentions that "Each CPA will be located within the geographical boundary of India."	OK	OK
B.2.2 Do the eligibility criteria cover conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo)?	PoA- Stand	14(b)	The eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD does not describe 'the condition to avoid double counting of emission reductions', correctly	CAR 11	--
B.2.3 Do the eligibility criteria cover the specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications?	PoA- Stand	14(c)	The eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD does not address the following <ul style="list-style-type: none"> • The specifications of technology/measure. • Specifications for the level and type of service, performance • compliance with testing standards 	CAR 12	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			as per the host country standards		
B.2.4 Do the eligibility criteria cover conditions to check the start date of the CPA through documentary evidence?	PoA- Stand	14(d)	The eligibility criteria to check the start date of the CPA is not correctly described in the B.2 section of webhosted SSC-PoA-DD.	CAR 13	--
B.2.5 Do the eligibility criteria cover conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs?	PoA- Stand	14(e)	The eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD does not clearly mention <ul style="list-style-type: none"> • Applicability of single or multiple methodology • All the applicability of the methodology (AMS III AV version 02) are not mentioned 	CAR 14	--
B.2.6 Do the eligibility criteria cover the conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as specified below:	PoA- Stand	14(f)			
B.2.6.1 PoAs that consist of one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of attachment A of Appendix B of the "Simplified modalities and procedures for small-scale CDM project activities".	PoA- Stand	9	The B.2 section of webhosted SSC-PoA-DD mentions that each CPA will demonstrate the additionality as per the requirements of "Attachment A of Appendix B of the Simplified modalities and procedures for small scale CDM project"	OK	OK
B.2.6.2 The CME shall demonstrate that compliance with the additionality-related eligibility criteria set in the PoA design document will ensure that all the relevant additionality-related	PoA- Stand	11	The eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD does not demonstrate the additionality of CPA in accordance with the requirements of the	CAR 15	--



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
guidelines, tools or any requirements embedded in the methodologies are met.			methodology (ies) applied		
B.2.6.3 For PoAs involving combinations of technologies /measures and/or methodologies, the eligibility criteria relative to each of them shall be proposed to demonstrate additionality.	PoA- Stand	12	The additionality for the combinations of technology measure and methodology are not described in the B.2 section of webhosted SSC-PoA-DD	CAR 16	--
B.2.7 Do the eligibility criteria cover the PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis?	EB 65 Ann3	14(g)	The local stakeholder consultation conditions are not clearly described in the B.2 section of webhosted SSC-PoA-DD	CAR 17	--
B.2.8 Do the eligibility criteria cover conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance?	PoA- Stand	14(h)	Yes the eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD cover the conditions to provide an affirmation funding from Annex I is not involved in the CPA implementation	OK	OK
B.2.9 Do the eligibility criteria cover, where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation)?	PoA- Stand	14(i)	The eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD does not describe the identification of target group and the distribution mechanisms in accordance with the para 14j of Annex 03 EB 65	CAR 18	--
B.2.10 Do the eligibility criteria cover, where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to	PoA- Stand	14(j)	Yes the eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD covers sampling requirements. • Sampling & survey methods described in the approved	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
sampling and surveys?			<p>methodology AMS III.AV. <i>Low greenhouse gas emitting water purification systems.</i></p> <ul style="list-style-type: none"> General guidelines for sampling and surveys for small-scale CDM project activities 		
B.2.11 Do the eligibility criteria cover, where applicable, the conditions that ensure that every CPA in aggregate meets the small-scale threshold criteria and remains within those thresholds throughout the crediting period of the CPA?	PoA- Stand	14(k)	Yes the eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD covers the conditions to ensure that CPA will meet the small-scale threshold criteria and remains within those thresholds throughout the crediting period of the CPA	OK	OK
B.2.12 Do the eligibility criteria cover, where applicable, the requirements for the de-bundling check, in case CPAs belong to small-scale (SSC) project categories?	PoA- Stand	14(l)	The de-bundling criteria is not correctly described in the eligibility condition mentioned in the B.2 section of webhosted SSC-PoA-DD, in accordance with para 14 of PoA standard	CAR 19	--
B.2.13 Are the eligibility criteria verifiable?	PoA- Stand	15	Please refer CAR 17-19 above	(CAR 17-19)	--
B.2.14 Are the eligibility criteria sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA?	PoA- Stand	16	Please refer CAR 17-19 above	(CAR 17-19)	--
B.2.15 For PoAs that include combinations of technologies /measures and/or methodologies, are distinct eligibility criteria developed separately for each of the combinations?	PoA- Stand	20&27	Please refer CAR 17-19 above	(CAR 17-19)	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.2.16 If a CPA uses technologies/measures from several methodologies, are the eligibility criteria derived from the requirements of all the methodologies?	PoA- Stand	27	Please refer CAR 17-19 above	(CAR 17-19)	--
B.3 Application of methodologies					
B.3.1 Are the technology/measures described and is the methodology chosen indicated?	DD		The technology measures are not referenced correctly in the B.3 section webhosted SSC-PoA-DD in accordance with the Guidelines for completing the programme design document form for small-scale CDM programme of activities (version 02.0)	CAR 20	--
B.3.2 In cases where multiple technologies/measures or multiple methodologies are being applied, are all the combinations of technologies/measures and methodologies that will be used in the PoA listed?	DD PoA- Stand	26	Please refer CAR 10a above	--	--
B.3.3 If applicable, is a description of the sampling plan provided and is it demonstrated how it meets applicable provisions in the "Standard for sampling and surveys for CDM project activities and programme of activities"?	DD		The B.3 section of the webhosted SSC-PoA-DD does not describe the sampling criteria for the PoA CME to justify the sampling in accordance with EB 55 Annex 38 and Annex 06 of EB 67	CAR 21	--
B.3.4 Has CME defined, where applicable, sampling plans for each of the combinations separately in accordance with the guidelines in section III. B of PoA Standard as well as any approved guidelines/standard from the Board pertaining to	PoA- Stand	27	Please refer CAR 21 above	(CAR 21)	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
sampling and surveys?					
B.3.5 Where combinations of technologies/measures and/or methodologies are applied for a PoA, is it demonstrated that there are no cross effects between the technologies/measures applied?	PoA- Stand	28	The combinations of technologies and methodologies applied under the current PoA it is not demonstrated that there are no cross effects between the technologies	CAR 22	--
B.3.6 Where such cross effects do exist, has the CME proposed methods to account for such cross effects using the "Procedures for requests to the executive board for deviation from an approved methodology" so as to ensure that the calculation of emission reductions is accurate?	PoA- Stand	28	Please refer CAR 10c above	--	--
B.3.7 Does the proposed PoA belong to the following eligible situations for applying combinations of technologies/measures and/or methodologies?	PoA- Stand	29			
B.3.7.1 The same combination of technologies/measures under the same combination of methodologies applied consistently in each and every CPA of a PoA	PoA- Stand	29 (a)	The B.3 section of the webhosted SSC-PoA-DD does not clearly state the combination of methodology and technology measure applicable under the PoA applicable for each CPA	CAR 23	--
B.3.7.2 A single methodology is consistently applied in each CPA of a PoA but using multiple technologies/measures	PoA- Stand	29 (b)	The B.3 section of SSC-PoA-DD does not clearly state applicability of methodology (ies) for each CPA and technology measures implemented by the CPA	CAR 24	--
B.3.7.3 A principle technology/measure is applied consistently in each CPA using multiple combinations of methodologies	PoA- Stand	29 (c)	The B.3 section of webhosted SSC-PoA-DD does not clearly state whether multiple methodologies are applicable to the PoA	CAR 25	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			with same technology for all the CPA		
B.3.7.4 Combinations of technologies/measures and methodologies vary across CPAs of a PoA.	PoA- Stand	29 (d)	The B.3 section of webhosted SSC-PoA-DD does not clearly state the consistency, of combination of methodology and technology measure, applicable for each CPA under the PoA	CAR 26	--
B.3.7.5 In case of (B.3.7.4) above, has the CME demonstrated that the implementation of the activities is integrated through the design of the programme?	PoA- Stand	29 (d)	In the B.3 section of webhosted SSC-PoA-DD does not clearly state the CME has not clearly described that the implementation CPAs is integrated through design of programme	CAR 27	--
B.3.7.6 In case of (B.3.7.4) above, is it confirmed that the intended sectoral scopes and the combinations of methodologies intended for implementation are known ex ante, and no revisions of PoA documentation are foreseen for the duration of one crediting period, i.e. seven or 10 years of PoA implementation?	PoA- Stand	29 (d)	The B.3 section of webhosted SSC-PoA-DD does not confirm the foreseen changes of sectoral scope and the combination of methodologies, also it is not clearly stated any revisions envisaged to PoA documentation	CAR 28	--
B.3.8 Has the CME optionally used the "Procedure for the submission and consideration of request for clarification on the application of approved small scale methodologies" (EB 34, annex 6) to seek clarifications on cross effects in the proposed combinations?	PoA- Stand	30	<i>In B.3 section of webhosted SSC-PoA-DD</i> , CME has not described the procedure for seeking the clarification on the cross effects of combinations. In accordance with the para 30 of PoA standard.	CAR 29	--
B.3.9 Is the compliance with the SSC threshold of a CPA met by following the "General Guidelines to SSC CDM methodologies"?	PoA- Stand	31	The compliance of SSC threshold for CPA in accordance with "General Guidelines to SSC CDM methodologies" is not defined in	CAR 30	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			the B.3 section of webhosted SSC-PoA-DD		
C Management system					
C.1.1 Is a clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies provided?	PoA- Stand	17(a)	The management system depicted in the C section of the webhosted SSC-PoA-DD defines that the CME would be involved in the process of CPA inclusion	OK	OK
C.1.2 Are records of arrangements for training and capacity development for personnel provided?	PoA- Stand	17(b)	CME has not provided the records of arrangements for training and capacity building for the PoA	CAR 31	--
C.1.3 Are procedures for technical review of inclusion of CPAs described?	PoA- Stand	17(c)	The procedure for the technical review for CPA inclusion is not defined in the C section of webhosted SSC-PoA -DD	CAR 32	--
C.1.4 Is a procedure to avoid double counting described?	PoA- Stand	17(d)	The Procedure to avoid double counting is not defined in the C section of webhosted SSC-PoA -DD	CAR 33	--
C.1.5 Are records and documentation control process for each CPA under the PoA described?	PoA- Stand	17(e)	The documentation process for all the records for each CPA under the PoA is not described in the C section of webhosted SSC-PoA -DD	CAR 34	--
C.1.6 Are measures for continuous improvements of the PoA management system described?	PoA- Stand	17(f)	The measures for the continuous improvement of PoA management system in not described in the C section of webhosted SSC-PoA -DD	CAR 35	--
C.1.7 Is there any other relevant elements indicated?	PoA- Stand	17(g)	Please refer CAR 12		
D Duration of PoA					



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
D.1 Start date of PoA					
D.1.1 Is there a description of how the start date was determined?	DD		In the D.1 section of webhosted SSC-PoA – DD the description for start date of the PoA is not correctly stated	CAR 36	--
D.2 Length of the PoA					
D.2.1 Is the length of the PoA stated with a maximum total length of 28 years?	DD VVS	197	Yes the length of PoA is stated as 28 years 0 months	OK	OK
E Environmental impacts					
E.1 Level at which environmental analysis is undertaken					
E.1.1 Is it indicated whether the environmental analysis is performed at the PoA and/or the CPA level?	DD VVS PS	199 165	In the E.1 section of webhosted SSC-PoA – DD it is mentioned that environmental analysis will be carried out at the CPA level	OK	OK
E.1.2 Is the choice of level at which the environmental analysis is undertaken justified?	DD		In the E.1 section of webhosted SSC-PoA – DD the choice of level at which the environmental analysis is undertaken is not justified in accordance with the guidelines to complete the PoA DD	CAR 37	--
E.2 Analysis of the environmental impacts					
E.2.1 Is a summary of the analysis of the environmental impacts and references to all related documentation in accordance with applicable provisions related to environmental impacts for PoAs in the Project Standard provided?	DD		The description provided in the E.2 section of webhosted SSC-PoA –DD is not in accordance with the guidelines to complete the PoA-DD	CAR 38	--
F Local stakeholder comments					



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
F.1 Solicitation of comments from local stakeholders	VVS	201			
F.1.1 Is it indicated whether the local stakeholder consultation process is performed at the PoA and/or the CPA level?	DD PS	166	Yes the F.1 section of webhosted SSC-PoA-DD mentions that "Local stakeholder consultation is done at SSC-CPA level"	OK	OK
F.1.2 Is the choice of level at which the local stakeholder consultation is undertaken justified?	DD		The choice of level at which the local stakeholder consultation undertaken is not clearly justified in the F.1 section of webhosted SSC-PoA-DD	CAR 39	--
F.1.3 Is there a description of the process by which comments from local stakeholders were invited and compiled?	DD		The process by which the comments from local stakeholders were invited is not clearly described in the F.1 section of webhosted SSC-PoA-DD	CAR 40	--
F.2 Summary of comments received	VVS	201			
F.2.1 Are stakeholders that have made comments identified?	DD		In the section F.2 of webhosted SSC-PoA-DD the stakeholders that have made comments are not identified in accordance with the guidelines to complete the SSC-PoA-DD	CAR 41	--
F.2.2 Is a summary of these comments provided?	DD		Yes the summary of comments is provided in the F.2 of webhosted SSC-PoA-DD	OK	OK
F.3 Report on consideration of comments received	VVS	201			
F.3.1 Is information demonstrating that all comments received have been considered provided	DD		The comments mentioned in section F.3 of webhosted SSC-PoA-DD is not consistent with the F.2 section	CAR 42	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
G G. Approval and authorization					
G.1 General					
G.1.1 Is it indicated whether the letter(s) of approval from Party(ies) which wishes to be involved in the PoA, is available at the time of submitting the SSC-PoA-DD to the validating DOE?	DD		The G.1 section of the webhosted SSC-PoA-DD is not in accordance with the guidelines to complete the PoA DD CME has not provided the host country approval letter for validation.	CAR 43	--
G.2 Approval			COUNTRY A	COUNTRY B	
G.2.1 Has the coordinating/managing entity obtained a letter of approval from the DNA of each Party involved in the proposed PoA confirming that: (a) The Party is a Party of the Kyoto Protocol (b) Participation in the proposed PoA is voluntary (c) In case of the host Party, the proposed PoA assists the host Party in achieving sustainable development	VVS PS	39&51 169&170	CME has not provided the <i>host country</i> approval letter for validation. Please refer CAR 43	NA (CAR 43)	--
G.2.2 Is(are) the letter(s) of approval unconditional with respect to (G.2.1) above?	VVS	40	CME has not provided the <i>host country</i> approval letter for validation. <i>Please refer CAR 43</i>	(CAR 43)	--
G.2.3 Has(ve) the letter(s) of approval been issued by the respective Party's DNA? If there is doubt with respect to (G.2.1) above, was it verified with the DNA that the letter of approval is valid for the	VVS	41,42	CME has not provided the <i>host country</i> approval letter for validation.	NA (CAR 43)	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
proposed PoA under validation?			<i>Please refer CAR 43</i>		
G.3 Authorization					
G.3.1 Has each project participant been authorized by at least one Party involved in a letter of approval?	VVS PS	45 172	CME has not provided the host country approval letter for validation. <i>Please refer CAR 43</i>	(CAR 43)	--
G.3.2 Is the information in tabular form in the SSC-PoA-DD consistent with the contact information for project participants provided?	VVS	46	CME has not provided the host country approval letter for validation. <i>Please refer CAR 43</i>	(CAR 43)	--
G.3.3 Are any entities other than those approved as project participants included in the SSC-PoA-DD?	VVS	47	CME has not provided the host country approval letter for validation. <i>Please refer CAR 43</i>	(CAR 43)	--
G.3.4 Has the approval of participation issued from the relevant DNA? And if in doubt, was it verified with the DNA that the approval of participation is valid for the proposed CDM project participants?	VVS	48	CME has not provided the host country approval letter for validation. <i>Please refer CAR 43</i>	(CAR 43)	--
G.3.5 Has the coordinating/managing entity obtained letters of authorization of its coordination of the PoA from each host Party?	PS	171	CME has not provided the host country approval letter for validation. <i>Please refer CAR 43</i>	(CAR 43)	--
G.3.6 Is CDM project participation recorded only at the PoA level while the operators of individual CPAs are not required to be project participants?	PS	173	CME has not provided the host country approval letter for validation. <i>Please refer CAR 43</i>	(CAR 43)	--
Part II. Generic component project activity (CPA)			Repeat all of Part II for each of the combination of technologies/measures		



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			and/or methodologies.		
A General description of a generic CPA					
A.1 Purpose and general description of generic CPAs					
A.1.1 Is a description of each generic CPA within the PoA provided?	DD		The description of generic CPA is not clearly described in the Part II A.1 section of webhosted SSC-PoA-DD	CAR 44	--
B Application of a baseline and monitoring methodology					
B.1 Reference of the approved baseline and monitoring methodology(ies) selected					
B.1.1 Is exact reference (number, title, version) of the selected methodology or multiple methodologies indicated?	DD VVS PS	74 37	Yes the Part II B.2 section of webhosted SSC-PoA-DD mentions "AMS III.AV version 02: Low Greenhouse Gas Emitting Water Purification Systems, EB 62"	OK	OK
B.1.2 Are there any tools and other methodologies to which the selected methodology refers?	DD VVS PS	74 37	The tools and other methodologies referred by the AMS III AV are not mentioned in the Part II B.2 section of webhosted SSC-PoA-DD	CAR 45	--
B.1.3 Is it confirmed that the selected methodology (ies) is(are) approved for application to CPAs under PoA s by the Board?	DD		Yes the methodology was approved by EB in its 62 nd meeting	OK	OK
B.2 Application of methodology(ies)					
B.2.1 Is the choice of the selected methodology (ies)	DD		Refer to Table-2	--	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
justified by showing that each generic CPA meets each applicability condition of the methodology(ies)?	VVS PS	76 38			
B.2.2 If applicable, is a general description of the sampling plan provided?	DD		The general description of sampling plan is not provided in <i>the Part II B.2 section of webhosted SSC-PoA-DD</i>	CAR 46	--
B.2.3 Is it demonstrated that the CPA qualifies as Type I, II, and/or III during every year of the crediting period in accordance with applicable provisions for project activity eligibility in the Project standard?	DD PS	81-84	the Part II B.2 section of webhosted SSC-PoA-DD does not demonstrate the qualification of CPA as Type I,II and /or III during every year of crediting period in accordance with applicable provisions for project activity eligibility in the Project standard (para 81 annex 5 EB 65 and annex 30 EB 67)	CAR 47	--
B.2.4 Is documentation that has been used as a basis of justification explained or include in Appendix 3? Are references provided?	DD		Please refer CAR 44-47 above	(CAR 44-47)	--
B.3 Sources and GHGs					
B.3.1 Are the sources and GHGs included in each generic CPA boundary described?	DD VVS PS	82 39	Yes the Part II B.3 section of webhosted SSC-PoA-DD tabulates the sources and GHG`s included in the CPA boundary	OK	OK
B.3.2 In cases where the selected methodology(ies) allows project participants to choose whether a source or gas is to be included in the CPA boundary, is the choice explained and justified?	VVS PS	84 40	The selected methodology does not provide the options for selection of GHG`s	OK	OK
B.3.3 Where possible, is a flow diagram physically	DD		The flow diagram is not consistent with the	CAR 48	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
delineating each generic CPA presented?			description provided in section A.6 "Technologies/measures" of Part I. CME to justify the same in accordance with annex 30 of EB 67.		
B.3.4 Are all the equipment, systems and flows of mass and energy included in the flow diagram?	DD		Please refer CAR 48above		
B.3.5 Are emissions sources and GHGs which included in the project boundary and the data and parameters to be monitored indicated in the diagram?	DD		The flow diagram depicted in Part II B.3 section of webhosted SSC-PoA-DD does not include emissions sources and GHGs which are included in the project boundary and the data and parameters to be monitored, CME to justify the same in accordance with annex 30 of EB 67	CAR 49	--
B.4 Description of baseline scenario					
B.4.1 Is it described how the baseline scenario is identified for each generic CPA?	DD		The Part II B.4 section of webhosted SSC-PoA-DD does not clearly describe the identification of baseline scenario in accordance with the annex 30 of EB 67	CAR 50	--
B.4.2 Is it explained how the baseline scenario is established in accordance with the selected methodology(ies) and applicable provisions for establishment and description of baseline scenarios in the Project standard?	DD VVS PS	88 41	The Part II B.4 section of webhosted SSC-PoA-DD does not clearly describe identification of baseline in accordance with applied methodology AMS III AV version 02	CAR 51	--
B.4.3 Do the project participants follow the "Guidelines on the consideration of suppressed demand in CDM methodologies" when establishing the baseline scenario, where future anthropogenic	PS	42	The CME has not followed the the "Guidelines on the consideration of suppressed demand in CDM methodologies" while establishing the	CAR 52	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
emissions by sources are projected to rise above current levels due to the specific circumstances of the host Party?			baseline scenario. CME has not justified the selection of baseline scenario in accordance with annex 2 of EB 68 in Part II B.4 section of webhosted SSC-PoA-DD		
B.4.4 Do the project participants take into account national and/or sectoral policies including E+/E-policies when establishing the baseline scenario?	VVS PS	93 43-45	The CME has not considered the national and/or sectoral policies including E+/E-policies when establishing the baseline Scenario in Part II B.4 section of webhosted SSC-PoA-DD	CAR 53	--
B.4.5 Where the procedure in the selected methodology (ies) involves several steps, is it described how each step is applied and is the outcome of each step transparently documented?	DD		The applied methodology AMS III AV version 02 does not refer to any tool or several steps for the identification of baseline scenario	OK	OK
B.4.6 Are key assumptions and rationales explained and justified?	DD		The key assumptions and the rationale used for determining the baseline scenarios are not justified in the Part II B.4 section of webhosted SSC-PoA-DD	CAR 54	--
B.4.7 Are all data used to establish the baseline scenario (variables, parameters, data sources, etc.) provided and explained?	DD		Variables, parameters, data sources for establishment of baseline scenario is not described and explained in the Part II B.4 section of webhosted SSC-PoA-DD	CAR 55	--
B.4.8 Are all relevant documentation and/or references provided?	DD		Please refer CAR 55 above	(CAR 55)	--
B.4.9 Is a transparent description of the baseline scenario provided?	DD VVS PS	92 46	The description of the technology of the baseline scenario is provided in the Part II B.4 section of webhosted SSC-PoA-DD	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.5 Demonstration of eligibility for a generic CPA					
B.5.1 Is it demonstrated how each generic CPA meets the eligibility criteria of the PoA including confirmation of additionality of the generic CPA for its inclusion into the PoA?	DD		The eligibility criterion mentioned in the Part II B.5 section of webhosted SSC-PoA-DD are not consistent with the eligibility conditions mentioned in the section B.2 of part I (please refer CAR 17-19)	CAR 56	--
B.6 Estimation of emission reductions of a generic CPA					
B.6.1 Explanation of methodological choices					
B.6.1.1 Is it explained how the methods or methodological steps, in the selected methodology, for calculating baseline emissions, project emissions, leakage emissions and emission reductions are applied to each generic CPA?	DD VVS PS	97 51	The Part II section B.6.1 of webhosted SSC-PoA-DD calculations for leakage emissions are not in accordance with the AMS I E	CAR 57	--
B.6.1.2 Is it clearly stated which equations will be used in calculating emission reductions?	DD VVS PS	97 50-51	The equations used for the calculating emission reductions are not cross referenced with the methodology in the Part II B.6.1 section of webhosted SSC-PoA-DD	CAR 58	--
B.6.2 Data and parameters that are to be reported ex-ante					
B.6.2.1 Is a compilation of information on the data and parameters that are not monitored during the crediting period but are determined before the validation and remain fixed throughout the	DD VVS PS	98 52	In Part II section B.6.2 of webhosted SSC-PoA-DD the data parameters not monitored during the crediting period are not in accordance with AMS III AV version 02.	CAR 59	--



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
crediting period included?					
B.6.2.2 Is it ensured that data that become available only after the registration/inclusion of the CPAs in the PoA (e.g. measurements after the implementation of the CPAs in the PoA) should not be included here but in the table in section B.7?	DD		Please refer CAR 59 above	(CAR 59)	--
B.6.2.3 The compilation of information may include data that are measured or sampled, and data that are collected from other sources (e.g. official statistics, expert judgment, proprietary data, IPCC, commercial and scientific literature, etc.), is the compilation in compliance with this?	DD		Please refer CAR 59 above	(CAR 59)	--
B.6.2.4 Data that are calculated with equations provided in the selected methodology(ies) or default values specified in the methodology(ies) should not be included in the compilation, is the compilation in compliance with this?	DD		Please refer CAR 59 above	(CAR 59)	--
B.6.2.5 For each piece of data or parameter, is the table in SSC-PoA-DD completed, following these instructions below:					
B.6.2.5.1 "Value(s) applied": Provide the value applied. Where a time series of data is used, where several measurements are	DD		Yes the value applied for the parameters are presented in the tabular form	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
undertaken or where surveys have been conducted, provide detailed information in Appendix 4. To report multiple values referring to the same data or parameter, use one table. If necessary, reference(s) to electronic spreadsheets may be used					
B.6.2.5.2 "Choice of data": Indicate and justify the choice of data source. Provide clear and valid references and, where applicable, additional documentation in Appendix 4	DD		Yes the choice of data is indicated with justification for the ex-ante fixed parameters	OK	OK
B.6.2.5.3 "Measurement methods and procedures": Where values are based on measurement, include a description of the measurement methods and procedures applied (e.g. which standards have been used), indicate the responsible person/entity that undertook the measurement, the date of the measurement and the measurement results. More detailed information can be provided in Appendix 4	DD		Yes the default values from IPCC have been used in	OK	OK
B.6.2.5.4 "Purpose of data": Choose one of the following: (i) Calculation of baseline emissions; (ii) Calculation of project emissions; (iii) Calculation of leakage	DD		Yes the purpose of data is mentioned in the table for each parameter	OK	OK
B.6.3 Ex-ante calculations of emission reductions					



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.6.3.1 Is a transparent ex ante calculation of project emissions, baseline emissions(or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the selected methodology provided?	DD		Not applicable. The ex-ante calculations are provided for the each CPA separately	--	--
B.6.3.2 For data or parameters available before validation, are values contained in the table in section B.6.2 of SSC-PoA-DD used?	DD		Not applicable. The ex-ante calculations are provided for the each CPA separately	--	--
B.6.3.3 For data/parameters not available before validation and monitored during the crediting period, are estimates for parameters contained in the table in section B.7.1 of SSC-PoA-DD used?	DD		Not applicable. The ex-ante calculations are provided for the each CPA separately	--	--
B.6.3.4 If any of these estimates has been determined by a sampling approach, is a description of the sampling efforts provided in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities"?	DD		Not applicable. The ex-ante calculations are provided for the each CPA separately	--	--
B.6.3.5 Is it documented how each equation is applied, in a manner that enables the reader to reproduce the calculation?	DD		Not applicable. The ex-ante calculations are provided for the each CPA separately	--	--
B.6.3.6 Where relevant, are additional background information and/or data in Appendix 4,	DD		Not applicable. The ex-ante calculations are provided for the each CPA separately	--	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
including relevant electronic spreadsheets provided?					
B.6.3.7 Is a sample calculation for each equation used provided, substituting the values used in the equations?	DD		Not applicable. The ex-ante calculations are provided for the each CPA separately	--	--
B.7 Application of the monitoring methodology and description of the monitoring plan					
B.7.1 Data and parameters to be monitored by each generic CPA					
B.7.1.1 Is specific information on how the data and parameters that need to be monitored would actually be collected during monitoring included?	DD		Yes the information on how the data and parameters that need to be monitored would actually be collected during monitoring are included	OK	OK
B.7.1.2 In case of data that are determined only once for the crediting period but that will become available only after registration/inclusion of the CPAs in the PoA, are they included here?	DD		Not applicable	OK	OK
B.7.1.3 For each piece of data or parameter, is the table in SSC-PoA-DD completed, following these instructions below:	DD				
B.7.1.3.1 "Source of data": Indicate the source(s) of data that will be used for the CPAs in the PoA (e.g. which exact national statistics). Where several sources may be used, justify which data sources should be preferred	DD		In Part II B.7.1 section of webhosted SSC-PoA-DD, Source of data mentioned for the following parameters is not in accordance with the AMS III AV version 02 and annex 30 EB 67	CAR 60	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			<ul style="list-style-type: none"> • QWPy • N P,y • Existence of public distribution network of safe drinking water • Water quality 		
B.7.1.3.2 "Value(s) applied": The value applied is an estimate of the data/parameter that will be monitored during the crediting period, but is used for the purpose of calculating estimated emission reductions. To report multiple values referring to the same data or parameter, use one table. If necessary, reference(s) to electronic spreadsheets may be used	DD		The actual values will be mentioned in the CPA DD.	OK	OK
B.7.1.3.3 "Measurement methods and procedures": Where data or parameters are to be monitored, specify the measurement methods and procedures, standards to be applied, accuracy of the measurements, person/entity responsible for the measurements, and, in case of periodic measurements, the measurement intervals	DD		In Part II B.7.1 section of webhosted SSC-PoA-DD the measurement methods and procedure for all the parameters are not described in accordance with AMS III AV version 02 and annex 30 EB 67	CAR 61	--
B.7.1.3.4 "QA/QC procedures": Describe the Quality Assurance (QA)/Quality Control (QC) procedures to be applied, including the calibration procedures, where applicable	DD		In Part II B.7.1 section of webhosted SSC-PoA-DD the "QA/QC procedures": for all the parameters are not described in accordance with AMS III AV version 02 and annex 30 EB 67	CAR 62	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.7.1.3.5 "Purpose of data": Choose one of the following: (i) Calculation of baseline emissions; (ii) Calculation of project emissions; (iii) Calculation of leakage.	DD		In Part II B.7.1 section of webhosted SSC-PoA-DD the "Purpose of data" for all the parameters are described in accordance with AMS III AV version 02 and annex 30 EB 67	OK	OK
B.7.1.4 Is there any relevant further background documentation provided in Appendix 5?	DD		No information is provided in the appendix 5	OK	OK
B.7.2 Description of the monitoring plan for a generic CPA					
B.7.2.1 Is the monitoring plan for a generic CPA developed in accordance with the approved monitoring methodology(ies), including applicable tool(s)?	DD VVS PS	198 156	The monitoring plan is in accordance with the Methodology AMS III AV version 02, however the data uncertainty and data archiving procedures are not mentioned	CAR 63	--
B.7.2.2 If data and parameters monitored in section B.7.1 of the SSC-PoA-DD are determined by a sampling approach, is a description of the sampling plan provided in accordance with the recommended outline for a sampling plan in the "Standard for sampling and surveys for CDM project activities and programme of activities"?	DD PS	53	<i>In Part II B.7.2 section of webhosted SSC-PoA-DD</i> the sampling plan is not mentioned in accordance with the Methodology AMS III AV version 02 and Annex 30 of EB 67	CAR 64	--
B.7.2.3 Is there any relevant further background information provided in Appendix 5?	DD		No information is provided in the Appendix 5	OK	OK
Part III Others					



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
A Appendix					
A.1 Appendix 1: Contact information on entitiy/individual responsible for the PoA					
A.1.1 For each organization listed in section A.4 of the SSC-PoA-DD, is the table in SSC-PoA-DD completed, with the following mandatory fields: Organization, Street/P.O. Box, City, Postcode, Country, Telephone, Fax and E-mail, and Name of contact person?	DD		Yes the appendix 1 contains the details as of all the organizations listed in section A.4 of webhosted SSC-PoA-DD.	OK	OK
A.2 Appendix 2: Affirmation regarding public funding					
A.2.1 If applicable, is the affirmation obtained from Parties included in Annex I providing public funding to the PoA attached?	DD		No public funding is involved in the PoA	OK	OK
A.3 Appendix 3: Application of methodology(ies)					
A.3.1 Is there any further background information on the applicability of the selected methodology(ies) provided?	DD		No background information on the applicability of methodologies is provided in the appendix 3 of webhosted SSC-PoA-DD	OK	OK
A.4 Appendix 4: Further background information on ex ante calculation of emission reductions					
A.4.1 Is there any further background information on the ex-ante calculation of emission reductions provided? This may include data, measurement results, data sources, etc.	DD		No background information on the ex-ante calculation of emission reductions is provided in the appendix 4 of webhosted SSC-PoA-DD	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
A.5 Appendix 5: Further background information on the monitoring plan					
A.5.1 Is there any further background information used in the development of the monitoring plan? This may include tables with time series data, additional documentation of measurement equipment, procedures etc.	DD		No background information on the development of the monitoring plan is provided in the appendix 5 of webhosted SSC-PoA-DD	OK	OK
B Global Stakeholder Consultation					
B.1.1 Is there any comment on the SSC-PoA-DD of the proposed project activity received during Global Stakeholder Consultation process?	VVS	34	No comments received from global stakeholders. During the webhosted period of 13 Jun 12 - 12 Jul 12	OK	OK
B.1.2 If yes, have all comments been taken into account during the validation of the proposed project activity?	VVS	35	Not applicable, No comments received from global stakeholders. During the webhosted period of 13 Jun 12 - 12 Jul 12	OK	OK
B.1.3 If comments indicate that the proposed project activity does not comply with the CDM requirements and are not substantiated, is there any further clarification from the entity providing the comment?	VVS	36	Not applicable, No comments received from global stakeholders. During the webhosted period of 13 Jun 12 - 12 Jul 12	OK	OK
B.1.4 If yes, how comments received have been taken due account?	VVS	36	Not applicable, No comments received from global stakeholders. During the webhosted period of 13 Jun 12 - 12 Jul 12	OK	OK
B.1.5 If no, are the comments as originally provided proceeded to assess?	VVS	36	Not applicable, No comments received from global stakeholders. During the webhosted period of 13 Jun 12 - 12 Jul 12	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
C Modalities of Communications (MoC)					
C.1.1 Has the corporate identity of all project participants and focal points included in MoC statement, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories been validated by:	VVS	53	The Modalities of Communications (MoC) is not submitted for validation	CAR 65	--
C.1.1.1 Directly checking evidence for corporate, personal identity and other relevant documentation; or	VVS	54(a)	Please refer CAR 65	(CAR 65)	--
C.1.1.2 Notarized documentation; or	VVS	54(b)	Please refer CAR 65	(CAR 65)	--
C.1.1.3 Written confirmation from the project participant or the coordinating/managing entity that all corporate and personal details, including specimen signatures, are valid and accurate.	VVS	54(c)	Please refer CAR 65	(CAR 65)	--
C.1.2 If (C.1.1.3) above was chosen, is it ensured that the MoC statement is received from the Coordinating/ managing entity?	VVS	55	Please refer CAR 65	(CAR 65)	--
C.1.3 If (C.1.1.3) above was chosen, is it ensured that the official who submits the MoC statement to the DOE and the official who signed the written confirmation (if a different person) is/are duly authorized to do so on behalf of the respective project participant?	VVS	56	Please refer CAR 65	(CAR 65)	--



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
C.1.4 If it is unable to validate the requirements by applying C.1.1.1 to C.1.1.3 above, are any further validation activities performed?	VVS	57	Please refer CAR 65	(CAR 65)	--
C.1.5 Has the latest version of the form "Modalities of Communication statement" (F-CDM-MOC) been used?	VVS PS	60(a) 72	Please refer CAR 65	(CAR 65)	--
C.1.6 Is the information required as per F-CDM-MOC, including its annex 1, correctly completed?	VVS PS	60(b) 72	Please refer CAR 65	(CAR 65)	--
C.1.7 Do the project participant's authorized signatories signing the F-CDM-MOC correspond to the project participant's authorized signatories included in F-CDM-MOC, annex 1?	VVS PS	60(c) 174	Please refer CAR 65	(CAR 65)	--
C.1.8 Is it confirmed that the CME is either the sole or a joint focal point for each scope of authority?	PCP	29	Please refer CAR 65	(CAR 65)	--
C.1.9 Is it confirmed that the number of joint focal points is limited to five, or equal to the number of host parties if greater than five?	PCP	29	Please refer CAR 65	(CAR 65)	--



TABLE 2 SPECIFIC REQUIREMENTS FOR METHODOLOGY → (NOT APPLICABLE, AS ALL THE POINTS ARE COVERED IN TABLE 1 “GENERAL REQUIREMENT PROTOCOL FOR POA “)

TABLE 2-1 *TOOLS PROTOCOL (ADDITIONALITY TOOL, COMBINED TOOL, EF-TOOL)... → IT IS NOT REQUIRED, AS THE PP HAS DEMONSTRATED ADDITIONALITY ON “MICROSCALE”

TABLE 2-2 *GUIDELINES PROTOCOL (INVESTMENT ANALYSIS, BARRIERS, COMMON PRACTICE) ...→.IT IS NOT REQUIRED, AS THE PP HAS DEMONSTRATED ADDITIONALITY ON “MICROSCALE”

VALIDATION REPORT

TABLE 3 RESOLUTION OF CORRECTIVE ACTION AND CLARIFICATION REQUESTS

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>CAR 01 Policy/measure</p> <p>The policy/measure of the POA is not clearly described w in the A.2 section of the webhosted SSC-PoA-DD</p>	A.2.1	<p>The stated goal of the proposed SSC-PoA is to provide safe drinking water as per national standards through promotion and by facilitating dissemination of low greenhouse gas emitting (low/zero electricity) water purification systems to rural households and/or communities in India which otherwise do not have access to a public distribution network of safe drinking water. The water purification system will reduce the carbon emission by allowing the families to purify the water reducing the usage of fossil fuels or non renewable biomass for boiling the water.</p> <p>The same has been incorporated in section A.2 of revised PoA DD,</p>	<p>The CME has clearly described the policy measure this is in line with requirement of EB 67 annex 30 after reviewing the same validation team accepts the changes and hence the CAR is closed</p>
<p>CAR 02 PoA description Section A.2</p> <p>The framework developed by the CME for the implementation of PoA and inclusion of CPA's in the PoA is not described correctly in the A.2 section of webhosted SSC-PoA-DD.</p>	A.2.2	<p>The CME has revised the operating and implementing framework of PoA.</p> <p>The same has been incorporated in section A.2 of revised PoA DD,.</p>	<p>The CME has described the framework for the implementation of PoA in the revised SSC-PoA-DD version 02</p> <p>Validation team accepts the change in accordance with the annex 30 of EB 67 hence CAR is closed.</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
CAR 03 Voluntary Action The Co-coordinating / Managing entity has not justified that the POA is voluntary action with documentary evidences	A.2.3	There are no mandatory regulations in India that mandates the implementation of low/zero greenhouse gas emitting water purification systems. General Carbon Advisory Services Pvt. Ltd.* , Ltd.* , CME of the programme is a consulting consulting firm delivering various energy & environmental commodities such as GHG ER project development, GHG ER transaction services, climate strategy for multi – sectoral, multi- national business entities, Renewable Energy Certificates and Renewable Purchase Obligations, power trading, green energy/power sourcing , PAT mechanism and ECerts, corporate social responsibility and sustainability. The CME is not mandated to comply with any community development norms by the host country.	The CME has provided <ul style="list-style-type: none"> • Certificate of incorporation for the firm • Bombay shops establishment After reviewing the above documents validation team confirms that the CME is not mandated by the host country for the implementation of the PoA and hence the voluntary action is confirmed. Validation team accepts the document submission and hence CAR is closed.
CAR 04 Emission reduction description The section A.2 webhosted SSC-PoA-DD does not describe how the PoA will result in emission reductions of GHG	A.2.4	The PoA DD has been revised in accordance with the methodology AMS III.AV. The programme will minimize the use of non renewable biomass or fossil fuel utilize or which otherwise would have been utilized for	The CME has revised the A.2 section of PoA DD in accordance with the AMS III AV version 02 and EB 65 annex 05 hence the validation team accepts the

* <http://www.general-carbon.com/>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>boiling as a means of purification to achieve the safe drinking water quality. The reduction in use of non renewable biomass or fossil fuel would result in the reduction of GHG emissions into the atmosphere.</p> <p>The same has been incorporated in section A.2 of revised PoA DD,.</p>	change and CAR is closed
<p>CAR 05 Sustainable Development</p> <p>The contribution of sustainable development is not correctly described in accordance with the indicators stipulated by the host country (NCDMA and MoEF) India</p>	A.2.6	<p>The contribution to sustainable development is corrected in accordance with the indicators stipulated by the host country (NCDMA and MoEF) India.</p> <p>The same has been incorporated in section A.2 of revised PoA DD,</p>	<p>The CME has revised the sustainable development description in the SSC-PoA-DD version 2 validation team accepts the correction in accordance with EB 65 annex 05 and the indicators stipulated by the host country (NCDMA and MoEF) India hence CAR is closed.</p>
<p>CAR 06</p> <p>The CME identified in the A.4 section of webhosted SSC-PoA-DD is not consistent with the appendix 1</p>	A.4.1	<p>The CME of the PoA is General Carbon Advisory Services Pvt. Ltd. and is private entity.</p> <p>The same has been incorporated in section A.4 and appendix 1 of revised PoA DD.</p>	<p>The CME has corrected the section A.4 in revised PoA-DD and is consistent with appendix 1 hence validation team accepts the correction and CAR is closed.</p>
<p>CAR 07 Technology measures</p> <p>The technology measures mentioned in the A.6 of the SSC-PoA-DD are not correctly</p>	A.6.1	<p>The PoA will deploy the following technologies as described in performance target as per "Evaluating household water</p>	<p>The CME has corrected the A.6 section in revised PoA-DD. The validation team</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
described.		<p>treatment options: Health based targets and microbiological performance specifications" (WHO 2011):</p> <ul style="list-style-type: none"> • Chemical disinfection • Membrane or structured porous media (ceramic, porous carbon black, etc.) filters: • Granular media filters • Solar disinfection • UV light technologies using lamps, including UV light emitting diodes • Thermal(heat based) technologies • Coagulation-flocculation and/or sedimentation <p>The above mentioned technologies is in accordance with AMS III. AV and it will achieve water quality as described in standard IS 10500:2012(2nd revision) or latest revision/standards/amendment if any.</p> <p>The detailed description of above technologies is mentioned in section A.6 of revised PoA DD. .</p>	<p>accepts the correction as CME has mentioned the technology measures in accordance with the AMS III AV version 02 and WHO standards (Evaluating household water treatment options: Health based targets and microbiological performance specifications" (WHO 2011):) As described in the PoA DD, the programme will achieve water quality as described in standard IS 10500:2012(2nd revision) or latest revision/standards/amendment if any. This is in line with AMS III AV version 02, hence the CAR is closed.</p>
CAR 08 Technology applicability	A.6.2	The methodology AMS III. AV refers to	The section A.6 of Revised



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
The CME of the PoA has not justified how the each technology measure described in the A.6 of webhosted SSC-PoA-DD are applicable under the applied methodology AMS III AV		performance target as per “Evaluating household water treatment options: Health based targets and microbiological performance specifications” (WHO 2011). The technologies described in section A.6 of revised PoA DD are in accordance with the above specifications. Hence these technologies are applicable under AMS III.AV.	PoA DD has been corrected in accordance with AMS III AV hence validation team accepts the correction and CAR is closed.
CAR 09 The CME of the PoA has not justified how the each technology measure described in the A.6 of webhosted SSC-PoA-DD is environmentally safe and sound	A.6.3	<p>The various technology described in PoA is in accordance with performance target as per “Evaluating household water treatment options: Health based targets and microbiological performance specifications” (WHO 2011) and will achieve water quality as specified in Drinking water specifications IS 10500:2012 (2nd revision) or latest revision/standard/amendment. Such technologies minimizes the usage of non renewable biomass/ fossil fuel or other pollutants which could result in GHG emission into the atmosphere. Hence the PoA will allow the above technologies which are environmentally safe and sound.</p> <p>The same has been incorporated in section A.6 of revised PoA DD.</p>	The CME has corrected the A.6 section of PoA DD with the description of how each technology measure is environmentally safe and sound validation team accepts the correction in accordance with EB 65 Annex 05



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>CAR 10 Demonstration of Additionality</p> <p>The B.1 section of webhosted SSC-PoA-DD does not describe the demonstration of additionality of PoA in accordance with EB55 Annex38</p>	B.1.1	<p>The additionality of the CPA would be as per the “Guidelines for demonstrating additionality of micro scale project activities”, version 04, Annex 26, EB 68”.</p> <p>The additionality will be demonstrated for each CPA.</p> <p>The same has been incorporated in section B.1 of revised PoA DD.</p>	<p>The CME has corrected the B.1 section in revised PoA DD as per “Guidelines on the demonstration of additionality of Small-scale project activities”, version 09, EB 68 hence validation team accepts the change and CAR is closed</p>
<p>CAR 11 Eligibility criteria</p> <p>The eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD does not describe ‘the condition to avoid double counting of emission reductions’, correctly</p>	B.2.2	<p>For each CPA ,CME will check for double counting by</p> <p>Identification of purification system will be done based on the unique identification code maintained in CME database containing:</p> <ul style="list-style-type: none"> e) Acronym of programme f) Acronym of CME & CPA implementer g) Location of CPA h) Serial number of water purifiers <p>Monitoring the database (UNFCCC and other GHG ER standards) to check project activity does not generate offsets more than</p>	<p>The revised PoA-DD in section B.2 the eligibility criteria for ‘the condition to avoid double counting of emission reductions’, has been corrected in accordance with the PoA standard paragraph 14 b of EB 65 annex 03 validation team accepts the correction and hence CAR is closed</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		once simultaneously. The same has been incorporated in section B.2 of revised PoA DD..	
<p>CAR 12 Eligibility criteria</p> <p>The eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD does not address the following</p> <ul style="list-style-type: none"> The specifications of technology/measure. Specifications for the level and type of service, performance <p>compliance with testing standards as per the host country standards</p>	B.2.3	<p>a. Each CPA will deploy technology/measures mentioned in the PoA which complies with the performance target as per “Evaluating household water treatment options: Health based targets and microbiological performance specifications” (WHO 2011) * ” or comparable national standard or guideline in accordance with AMS III.AV,version 03.</p> <p>b. Each technology will achieve water quality as described in Drinking Water specification IS 10500: 2012 (2nd revision) or latest revision/standard/amendment if any..</p> <p>The same has been incorporated in section B.2 of revised PoA DD.</p>	The revised PoA-DD submitted by the CME has corrected the eligibility criteria with conditions for the specifications of technology and standards for level of service in accordance with the AMS III AV version 02 and WHO standards hence validation team accepts the correction and CAR closed.
<p>CAR 13 Eligibility criteria</p> <p>The eligibility criteria to check the start date of the CPA is not correctly described in the B.2</p>	B.2.4	<p>The start date of CPA will be</p> <ul style="list-style-type: none"> After the date of commencement of 	The eligibility criteria has been corrected in the section B.2of revised PoA DD in

* http://www.who.int/water_sanitation_health/publications/2011/evaluating_water_treatment.pdf



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
section of webhosted SSC-PoA-DD.		<p>PoA validation i.e starting date of PoA.</p> <ul style="list-style-type: none"> Purchase order of water purification system/water purifiers <p>The same has been incorporated in section B.2 of revised PoA DD.</p>	accordance with the Paragraph 14 d of EB 65 Annex 03 hence validation team accepts the correction and CAR is closed
<p>CAR 14 Eligibility criteria</p> <p>The eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD does not clearly mention</p> <ul style="list-style-type: none"> Applicability of single or multiple methodology <p>All the applicability of the methodology (AMS III AV version 02) are not mentioned</p>	B.2.5	<p>Only AMS III.AV is applicable under this PoA and each CPA will satisfy the applicability criteria described in approved methodology AMS III.AV. <i>Low greenhouse gas emitting water purification system.</i></p> <p>The same has been incorporated in section B.2 of revised PoA DD.</p>	<p>The B.2 section of revised PoA-DD states that only AMS III AV methodology will be applicable and mentions all the applicability criterion AMS III AV version 02</p> <p>Hence Validation team accepts the correction and CAR is closed</p>
<p>CAR 15 Eligibility criteria</p> <p>The eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD does not demonstrate the additionality of CPA in accordance with the requirements of the methodology (ies) applied</p>	B.2.6.2	<p>The additionality at each CPA level will be demonstrated as per the requirement of methodology AMS III.AV. in accordance with "Guidelines for demonstrating additionality of micro scale project activities", version 04, Annex 26, EB 68".</p> <p>The same has been incorporated in section B.2 of revised PoA DD.</p>	<p>The B.2 section of revised PoA-DD states that "the additionality of each CPA will be demonstrated as per the requirement of methodology AMS III AV in accordance with EB 68 Annex 27 and Annex 26</p> <p>Hence Validation team accepts the correction and CAR is closed</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>CAR16</p> <p>The additionality for the combinations of technology measure and methodology are not described in the B.2 section of webhosted SSC-PoA-DD</p>	B.2.6.3	<p>The PoA will deploy combination of technologies as per the methodology AMS III.AV</p> <p>The additionality for combination of technology measure and methodology at the CPA level will be demonstrated as per the requirement of methodology AMS III.AV. in accordance with "Guidelines for demonstrating additionality of micro scale project activities", version 04, Annex 26, EB 68".</p> <p>The same has been incorporated in section B.2 of revised PoA DD.</p>	<p>The B.2 section of revised PoA-DD states that "the additionality of each CPA will be demonstrated as per the requirement of methodology AMS III AV in accordance with EB 68 Annex 27 and Annex 26</p> <p>The same will be applicable to all the combination of technology measure and methodology</p> <p>Hence, Validation team accepts the correction and CAR is closed</p>
<p>CAR 17 Local Stake holder</p> <p>The local stakeholder consultation conditions are not clearly described in the B.2 section of webhosted SSC-PoA-DD</p>	B.2.7	<p>The local stakeholder consultation for each CPA will be conducted as follows:</p> <ul style="list-style-type: none"> f. Identification of local stakeholders (identified by CME and CPA implementer) g. Invitation to local stakeholder consultation or meets h. Describing the CPA project activity i. Inviting comments from local stakeholders 	<p>The B.2 section of revised PoA-DD states that local stakeholder consultation will be conducted at CPA level and describes the conditions for local stakeholder consultation in accordance with paragraph 14 g of EB 65 annex 3</p> <p>Hence, Validation team accepts the correction and</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>j. Compilation of the comments and responding with corrective actions as required.</p> <p>The same as been incorporated in section B.2 of revised PoA DD.</p>	CAR is closed
<p>CAR 18 identification of target group/eligibility criteria</p> <p>The eligibility criteria mentioned in the B.2 section of webhosted SSC-PoA-DD does not describe the identification of target group and the distribution mechanisms in accordance with the para 14i of Annex 03 EB 65</p>	B.2.9	<p>The target group of each CPA will be rural households currently using fossil fuel or non renewable biomass in 3 stone fire system to boil water as means of water purification and don't have access to safe drinking water.</p> <p>The households or communities would be identified by government identified list of families who are below poverty line (BPL) card holders and/or ration card and/or electoral card and/or any other government approved identification card</p> <p>The same has been incorporated in section B.2 of revised PoA DD, .</p>	<p>The B.2 section of revised SSC-PoA-DD states the target group is identified as" the households or communities currently using or/and would otherwise use fossil fuel or non renewable biomass to boil water as means of water purification and don't have access to safe drinking water."</p> <p>The B.2 section of the revised PoA DD also has incorporated the distribution mechanism applicable to the PoA in accordance with paragraph 14 i of EB 65 annex 03</p> <p>Hence Validation team</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			accepts the correction and CAR is closed
<p>CAR 19 De-bundling</p> <p>The de-bundling criteria is not correctly described in the eligibility condition mentioned in the B.2 section of webhosted SSC-PoA-DD, in accordance with para 14 of PoA standard</p>	B.2.12	<p>The debundling criteria is now described as per EB 47, Annex 32 and EB 54, Annex 13, "Guidelines on assessment of debundling for SSC project activities" which mentions that If each of the independent subsystems/measures (e.g., biogas digester, solar home system) included in the CPA of a PoA is no larger than 1% of the small-scale thresholds defined by the methodology applied, then that CPA of PoA is exempted from performing de-bundling check i.e., considering as not being a de-bundled component of a large scale activity.</p> <p>Each independent subsystems/measures included in the CPA will have annual emission reduction not greater than 0.6ktCO₂e/year(i.e. 1% of 60 ktCO₂e) and will be exempted from performing de-bundling check.</p> <p>The same is incorporated in section B.2 of revised PoA DD,</p>	<p>The B.2 section of revised PoA-DD is in accordance with paragraph 10 "Guidelines on assessment of de-bundling for SSC project activities", EB 54 Annex 13,</p> <p>validation team accepts the correction and hence CAR is closed</p>
<p>CAR20</p> <p>The technology measures are not referenced correctly in the B.3 section webhosted SSC-</p>	B.3.1	<p>The technology measures mentioned in B.3 are referenced as per section A.6 of revised PoA DD which is in accordance with</p>	<p>The technology measures mentioned in the B.3 section of PoA-DD are now</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
PoA-DD in accordance with the Guidelines for completing the programme design document form for small-scale CDM programme of activities (version 02.0)		Guidelines for completing the programme design document form for small-scale CDM programme of activities.	consistent with section A.6 of revised PoA DD and in accordance with Guidelines for completing the programme design document form for small-scale CDM programme of activities (version 02.0) validation team accepts the correction and hence CAR is closed
CAR 21 Sampling criteria The B.3 section of the webhosted SSC-PoA-DD does not describe the sampling criteria for the PoA CME to justify the sampling in accordance with EB 55 Annex 38 and Annex 06 of EB 67	B.3.3	Sampling will be undertaken for baseline justification and monitoring parameters for each CPA as per the requirements of para 17 of AMS - I.E which states that as per the relevant requirements for sampling in the "Standard for sampling and surveys for CDM project activities and programme of activities", Annex 4, EB 69 and "Guidelines for sampling and surveys for CDM project activities and programme of activities", Annex 5, EB 69 . When biennial inspection is chosen a 95% confidence interval and a 10% margin of error requirement shall be achieved for the sampling parameter. On the other hand when the project proponent chooses to inspect annually, a 90% confidence interval and a 10% margin of error requirement shall be	The B.3 section of revised PoA-DD describe the sampling criteria for the PoA in accordance with EB 69 annex 4 and 5 . Validation team accepts the correction and hence CAR is closed



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>achieved for the sampled parameters. In cases where survey results indicate that 90/10 precision or 95/10 precision is not achieved, the lower bound of a 90% or 95% confidence interval of the parameter value may be chosen as an alternative to repeating the survey efforts to achieve the 90/10 or 95/10 precision.</p> <p>The same has been incorporated in section B.3 of revised PoA DD.</p>	
<p>CAR 22 Cross effects due to combination of technology</p> <p>The combinations of technologies and methodologies applied under the current PoA it is not demonstrated that there are no cross effects between the technologies</p>	B.3.5	<p>The corrections has been done in accordance with para 28, Annex 3, EB 65.</p> <p>Please refer to section B.3 of revised PoA DD.</p>	<p>The B.3 section of revised PoA-DD the cross effects for the <i>combinations of technologies and methodologies applied under the current PoA</i> are <i>demonstrated</i> in accordance with paragraph 28 of EB 65 annex 3</p> <p>Validation team accepts the correction and hence CAR is closed</p>
<p>CAR 23</p> <p>The B.3 section of the webhosted SSC-PoA-DD does not clearly state the combination of methodology and technology measure</p>	B.3.7.1	Under the current PoA the only applicable methodology is AMS III.AV. with combination of technologies as mentioned in section A.6.	The revised section B.3 of revised PoA-DD is corrected and the combination of methodology and technology



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
applicable under the PoA applicable for each CPA		The same has been incorporated in section B.3 of revised PoA DD.	measures applicable under the PoA applicable for each CPA are mentioned in accordance with paragraph 29 a of EB 65 annex 03 hence validation team accepts the correction and CAR is closed
CAR 24 Applicability conditions The B.3 section of SSC-PoA-DD does not clearly state applicability of methodology (ies) for each CPA and technology measures implemented by the CPA	B.3.7.2	For all CPAs under this PoA , methodology AMS III.AV, version 02 is applicable and will deploy combination of technologies as mentioned in section A.6 of PoA DD. The same has been incorporated in section B.3 of revised PoA DD.	The section B.3 of revised PoA-DD is corrected and the applicability of methodology (ies) for each CPA and technology measures implemented by the CPA under the PoA are mentioned in accordance with paragraph 29 b of EB 65 annex 03 hence validation team accepts the correction and CAR is closed
CAR 25 Applicability conditions The B.3 section of webhosted SSC-PoA-DD does not clearly state whether multiple methodologies are applicable to the PoA with same technology for all the CPA	B.3.7.3	The methodology applicable for the proposed PoA is AMS III.AV., version 02 and technology mentioned in the PoA is in accordance with the methodology. The same has been incorporated in section B.3 of revised PoA DD.	The section B.3 of revised PoA-DD is corrected and the applicable methodology (ies) for each CPA is mentioned as AMS III AV version 02 for all the combination of technology measures



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			implemented by the CPA under the PoA in accordance with paragraph 29 c of EB 65 annex 03 hence validation team accepts the correction and CAR is closed
CAR 26 Applicability conditions The B.3 section of webhosted SSC-PoA-DD does not clearly state the consistency, of combination of methodology and technology measure, applicable for each CPA under the PoA	B.3.7.4	The CPA may deploy any of the technology as mentioned in section A.6 of PoA DD which is in accordance with the methodology AMS III.AV. The same has been incorporated in section B.3 of revised PoA DD.	The section B.3 of revised PoA-DD is corrected and the applicable methodology for each CPA and technology measures implemented by the CPA under the PoA are mentioned in accordance with paragraph 29 d of EB 65 annex 03 hence validation team accepts the correction and CAR is closed
CAR 27 In the B.3 section of webhosted SSC-PoA-DD does not clearly state the CME has not clearly described that the implementation CPAs is integrated through design of programme	B.3.7.5	The CPAs under this PoA will follow the methodology AMS III.AV, version 02 and will deploy the technologies as mentioned in section A.6 of PoA DD. The same has been incorporated in section B.3 of revised PoA DD.	The section B.3 of revised PoA-DD is corrected and the applicability of methodology (ies) for each CPA and technology measures implemented by the CPA under the PoA are mentioned in accordance with paragraph 29 b of EB 65 annex 03 hence validation



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			team accepts the correction and CAR is closed
<p>CAR 28</p> <p>The B.3 section of webhosted SSC-PoA-DD does not confirm the foreseen changes of sectoral scope and the combination of methodologies, also it is not clearly stated any revisions envisaged to PoA documentation</p>	B.3.7.6	<p>All the CPAs under this PoA will follow the methodology AMS III. AV, sectoral scope 03 and there are no foreseen changes in sectoral scope for the entire lifetime of PoA.</p>	<p>The section B.3 of revised PoA-DD is corrected and it is mentioned that the CME does under the PoA are mentioned in accordance with paragraph 29 b of EB 65 annex 03 hence validation team accepts the correction and CAR is closed</p>
<p>CAR 29 Combination of technology and cross effect</p> <p>In B.3 section of webhosted SSC-PoA-DD , CME has not described the procedure for seeking the clarification on the cross effects of combinations. In accordance with the para 30 of PoA standard.</p>	B.3.8	<p>The procedure for seeking the clarification on the cross effects of combination of technologies/measures and/or methodologies has been described in section B.3 of revised PoA DD in accordance with para 28 & 30, Annex 3, EB 65.</p> <p>In case any cross effects are identified CME may use Procedure for the submission and consideration of request for clarification on the application of approved small scale methodologies, annex 6, EB 34.</p> <p>Please refer to section B.3 of revised PoA DD,</p>	<p>The section B.3 of revised PoA-DD is corrected and procedure for seeking the clarification on the cross effects of combinations of technology /measures and or methodologies is described in accordance with paragraph 30 of EB 65 annex 03 hence validation team accepts the correction and CAR is closed</p>
CAR 30 Compliance of SSC threshold	B.3.9	Each CPA will comply with SSC threshold as	The CME has included the



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
The compliance of SSC threshold for CPA in accordance with "General Guidelines to SSC CDM methodologies" is not defined in the B.3 section of webhosted SSC-PoA-DD		described in section B.2 of revised PoA DD in accordance with "General guidelines to Small scale CDM methodologies", version 17, EB 61.	compliance of SSC threshold for CPA in eligibility criteria described in the section B.2 of revised PoA DD this is in accordance with the paragraph 30 of EB 65 annex 03 hence validation team accepts the correction and CAR is closed
CAR 31 CME has not provided the records of arrangements for training and capacity building for the PoA	C.1.2	The CME has provided the records of arrangements for training and capacity building for the PoA in accordance with para 17 (b) of EB 65, Annex 3. The same has been incorporated in section C of revised PoA DD.	The CME has revised the section C of PoA DD in accordance with paragraph 17 of EB 65 annex 03 hence validation team accepts the correction and CAR is closed
CAR 32 Procedure for technical review The procedure for the technical review for CPA inclusion is not defined in the section 'C' of webhosted SSC-PoA -DD	C.1.3	The CME has provided the procedure for the technical review for CPA inclusion in accordance with para 17 (c) of EB 65, Annex 3. The same has been incorporated in section C of revised PoA DD,	The CME has revised the section C of PoA DD in accordance with paragraph 17 of EB 65 annex 03 hence validation team accepts the correction and CAR is closed
CAR 33 Double counting The Procedure to avoid double counting is not defined in the C section of webhosted SSC-	C.1.4	The CME has provided the procedure to avoid double counting in accordance with para 17 (d) of EB 65, Annex 3.	The CME has revised the section C of PoA DD in accordance with paragraph 17 of EB 65 annex 03 hence



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
PoA –DD		The same has been incorporated in section C of revised PoA DD.	validation team accepts the correction and CAR is closed
CAR 34 Documentation process for records The documentation process for all the records for each CPA under the PoA is not described in the <i>C section of webhosted SSC-PoA -DD</i>	C.1.5	The CME has provided the documentation process for all the records for each CPA under the PoA in accordance with para 17 (e) of EB 65, Annex 3. The same has been incorporated in section C of revised PoA DD.	The CME has revised the section C of PoA DD in accordance with paragraph 17 of EB 65 annex 03 hence validation team accepts the correction and CAR is closed
CAR 35 Continuous improvement measures The measures for the continuous improvement of PoA management system in not described in the C section of webhosted SSC-PoA -DD	C.1.6	The CME has described the measures for the continuous improvement of PoA management system in accordance with para 17 (f) of EB 65, Annex 3. The same has been incorporated in section C of revised PoA DD.	The CME has revised the section C of PoA DD in accordance with paragraph 17 of EB 65 annex 03 hence validation team accepts the correction and CAR is closed
CAR 36 Start Date of PoA In the D.1 section of webhosted SSC-PoA – DD the description for start date of the PoA is not correctly stated	D.1.1	The start date of PoA is 13/06/2012. As per EB 55 Annex 38, the starting date of any CPA under the PoA cannot be prior to the commencement of validation, i.e. the date on which the PoA-DD is first published for global stakeholder consultation. The proposed PoA was uploaded on 13/06/2012.	The CME has corrected the D.1 section in the revised PoA DD in accordance with EB 55 annex 38 after reviewing the validation team accepts the correction and CAR is closed



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		The same has been incorporated in section D.1 of revised PoA DD.	
CAR 37 Environment Analysis In the E.1 section of webhosted SSC-PoA – DD the choice of level at which the environmental analysis is undertaken is not justified in accordance with the guidelines to complete the PoA DD	E.1.2	<p>The project activity under this PoA does not fall under the purview of the Environmental Impact Assessment (EIA) notification of the Ministry of Environment and Forest, Government of India, 2006 (http://www.envfor.nic.in/legis/eia/so1533.pdf).</p> <p>Hence, it is not required by the host party to conduct the environmental impact assessment either at PoA or CPA level.</p> <p>The same has been incorporated in section E.1 of revised PoA DD.</p>	<p>The CME has revised the E.1 section of PoA DD and it is stated that Environmental Impact Assessment (EIA) is not required for the projects under the PoA</p> <p>Validation team reviewed the notification by the host country to confirm the correction and hence CAR is closed</p>
CAR 38 The description provided in the E.2 section of webhosted SSC-PoA –DD is not in accordance with the guidelines to complete the PoA-DD	E.2.1	The section E.2 has been corrected in revised PoA DD in accordance with the guidelines to complete the PoA DD.	The CME has revised the E.2 section of PoA DD in accordance with the guidelines to complete the PoA DD validation team accepts the correction and hence CAR is closed
CAR 39 Local Stakeholder consultation The choice of level at which the local	F.1.2	The local stakeholder consultation was conducted both at PoA and CPA level and the	In the F.1 section of revised PoA DD in accordance with



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
stakeholder consultation undertaken is not clearly justified in the F.1 section of webhosted SSC-PoA-DD		<p>comments were invited.</p> <p>The same has been incorporated in section F.1 of revised PoA DD.</p>	<p>paragraph 166 of EB 65 annex 05 validation team accepts the correction and CAR is closed</p>
<p>CAR 40 Local Stakeholder consultation</p> <p>The process by which the comments from local stake holders were invited is not clearly described in the F.1 section of webhosted SSC-PoA-DD</p>	F.1.3	<p>The stakeholder consultation was conducted at national level to get the comments of various stakeholders about the project. This was conducted to acquire details, feedback, and create preparedness for possible hindrances likely to affect the project.</p> <p>The stakeholder consultation for the PoA was undertaken by CME as the PoA co-ordinating/managing entity.</p> <p>The PoA DD was made publicly available through GC's website on 25th January 2012. The stakeholders identified throughout the nation were invited to comment via mails, phone calls, personal invitation.</p> <p>The same has been described in section F.1 of revised PoA DD.</p>	<p>In the F.1 section of revised PoA DD in accordance with paragraph 166 of EB 65 annex 05 validation team accepts the correction and CAR is closed</p>
<p>CAR 41 Stakeholder identification</p> <p>In the section F.2 of webhosted SSC-PoA-DD the stakeholders that have made comments are not identified in accordance with the guidelines to complete the SSC-PoA-DD</p>	F.2.1	<p>The stakeholders who have made comments are identified and mentioned in accordance with the guidelines to complete SSC PoA DD.</p> <p>Please refer to section F.2 of revised PoA DD.</p>	<p>In the F.1 section of revised, PoA DD , the stakeholders who made comments are identified, in accordance with of EB 67 annex 30 validation</p>



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			team accepts the correction and CAR is closed
CAR 42 The comments mentioned in section F.3 of webhosted SSC-PoA-DD is not consistent with the F.2 section	F.3.1	The comment mentioned is now consistent in section F.2 and F.3 of PoA DD. Please refer to section F.2 and F.3 of revised PoA DD.	The section F.3 and F.2 of revised PoA DD are consistent which is in accordance with of EB 67 annex 30 validation team accepts the correction and CAR is closed
CAR 43 The G.1 section of the webhosted SSC-PoA-DD is not in accordance with the guidelines to complete the PoA DD CME has not provided the Host country approval letter for validation.	G.1.1	The CME has applied to the DNA of India for Host Country Approval on April 27 th 2012. The CME was invited for meeting on September 24 th 2012.	Host country approval is not provided CAR 43 is closed.
Part II. Generic component project activity (CPA)			
CAR 44 Description of CPA – Section A.1 The description of generic CPA is not clearly described in the Part II A.1 section of webhosted SSC-PoA-DD	A.1.1	The description of generic CPA is mentioned clearly in section A.1 of Part II in accordance with the revised PoA DD.	The section A.1 in Part II of revised PoA PDD describes the generic CPA clearly in accordance with EB 67 Annex 30 hence validation team accepts the correction and CAR is closed
CAR 45 The tools and other methodologies referred by the AMS III AV are not mentioned in the	B.1.2	The proposed PoA will follow methodology and tools wherever applicable:	The section B.2 in Part II of revised PoA PDD mentions all the tools and other



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
Part II B.2 section of webhosted SSC-PoA-DD		<p>AMS III.AV: Low Greenhouse Gas Emitting Water Purification Systems, version 02</p> <p>AMS I.E Switch from non renewable biomass for thermal applications by the user, version 05, EB 68</p> <p>Tool to calculate project or leakage CO2 emissions from fossil fuel combustion</p> <p>Tool to calculate baseline, project and/or leakage emissions from electricity consumption.</p> <p>Guidelines for demonstrating additionality of microscale project activities, (version 04).</p> <p>The same has been incorporated in section B.2 of Part II section in revised PoA DD.</p>	<p>methodologies prescribed by the applied methodology AMS III AV version 02 in accordance with EB 67 Annex 30 hence validation team accepts the correction and CAR is closed</p>
<p>CAR 46 Sampling plan</p> <p><i>The general description of sampling plan is not provided in the Part II B.2 section of webhosted SSC-PoA-DD</i></p>	B.2.2	<p>The sampling plan is described in section B.2 of Part II of revised PoA DD in accordance with "Standard for sampling and surveys for CDM project activities and programme of activities", version 03, EB 69.and Guidelines for sampling and surveys for CDM project activities and programme of activities", Annex</p>	<p>The section B.2 in Part II of revised PoA DD has been corrected by the CME and the sampling plan is described in accordance with EB 69 annex 4 and 5 hence validation team accepts the correction and CAR is closed</p>



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		5, EB 69. The detail sampling plan is described in section B.7.2 of Part II of PoA DD.	
CAR 47 Qualification of CPA in the inclusion of PoA the Part II B.2 section of webhosted SSC-PoA-DD does not demonstrate the qualification of CPA as Type I,II and /or III during every year of crediting period in accordance with applicable provisions for project activity eligibility in the Project standard (para 81 annex 5 EB 65 and annex 30 EB 67)	B.2.3	As per para 81, project activity eligibility criteria for small scale project activities mentioned in Clean Development Mechanism Project Standard The CPA under this PoA will have emission reduction not exceeding 60 ktCO ₂ e per year in any year of the crediting period. The same will be demonstrated for each CPA under this PoA. Hence the proposed SSC-CPA under this PoA qualifies as Type III. The same has been incorporated in section B.2 of part II in revised PoA DD.	The section B.2 in Part II of revised PoA DD has been corrected by the CME and eligibility of the CPA has been described in accordance with paragraph 81 EB 65 annex 05 hence validation team accepts the correction and CAR is closed
CAR 48 The flow diagram is not consistent with the description provided in section A.6 "Technologies/measures" of Part I. CME to justify the same in accordance with annex 30 of EB 67.	B.3.3	The flow diagram has been revised in section B.3 of Part II of revised PoA DD which is in line with annex 30 of EB 67.	The flow diagram depicted in the B.3 section in part II of revised PoA DD is corrected in accordance with EB 67 annex 30 hence validation team accepts the correction and CAR is closed
CAR 49 The flow diagram depicted in Part II B.3 section of webhosted SSC-PoA-DD does not include emissions sources and GHGs which	B.3.5	The emission sources and GHGs are included in the flow diagram in section B.3 of Part II of revised PoA DD in accordance with AMS III. AV, version 02.	The flow diagram depicted in the B.3 section in part II of revised PoA DD is corrected and the emission sources



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
are included in the project boundary and the data and parameters to be monitored, CME to justify the same in accordance with annex 30 of EB 67			and GHG's are included in accordance with AMS III AV version 02 and EB 67 annex 30, hence validation team accepts the correction and CAR is closed
CAR 50 identification of baseline scenario The Part II B.4 section of webhosted SSC-PoA-DD does not clearly describe the identification of baseline scenario in accordance with the annex 30 of EB 67	B.4.1	<p>As per the para 6 of methodology, AMS III AV for simplified and standardized approach it is assumed that fossil fuel or non renewable biomass (NRB) is used to boil water as means of purification of water in the absence of project activity.</p> <p>For each CPA baseline survey will be conducted to determine</p> <ol style="list-style-type: none"> 1. Total project population 2. Average number of person in households 3. Types of fuel used for boiling 4. Types of stoves in place 5. Method of purification of water practised 6. Access to safe drinking water 7. Average volume of drinking water per person per day <p>Please refer to section B.4 in Part II of revised PoA DD.</p>	<p>The CME has justified the baseline identification in accordance with the paragraph 06 of AMS III AV version 02 in the revised PoA DD. The CME has also described the survey method to justify the baseline identification of baseline</p> <p>hence validation team accepts the correction and CAR is closed</p>



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>CAR 51 <i>identification of baseline scenario</i></p> <p>The Part II B.4 section of webhosted SSC-PoA-DD does not clearly describe identification of baseline in accordance with applied methodology AMS III AV version 02</p>	B.4.2	<p>The baseline identification has been described as per para 6 methodology AMS III.AV, for simplified and standardized approach it is assumed that fossil fuel or non renewable biomass (NRB) is used to boil water as means of purification of water in the absence of project activity.</p> <p>The same has been incorporated in section B. 4 of Part II in PoA DD, version 02.</p>	<p>The CME has justified the baseline identification in accordance with the paragraph 06 of AMS III AV version 02 in the revised PoA DD. The CME has also described the survey method to justify the baseline identification of baseline hence validation team accepts the correction and CAR is closed</p>
<p>CAR 52 Suppressed demand</p> <p>The CME has not followed the the “Guidelines on the consideration of suppressed demand in CDM methodologies” while establishing the baseline scenario. CME has not justified the selection of baseline scenario in accordance with annex 2 of EB 68 in Part II B.4 section of webhosted SSC-PoA-DD</p>	B.4.3	<p>For the baseline identification, EB 68, Annex 2 is not applicable for this programme because as per Para 4, the Host country i.e. India, where programme of activity would take place does not fall under “the least developed countries, small island developing States, African countries and countries underrepresented in the clean development mechanism</p>	<p>As replied by the PP, “for the baseline identification, EB 68, Annex 2 is not applicable for this programme because as per Para 4, the Host country i.e. India, where programme of activity would take place does not fall under “the least developed countries, small island developing States, African countries and countries underrepresented in the clean development mechanism” having reviewed</p>



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			this, the validation team closed this CAR.
<p>CAR 53 National policy</p> <p>The CME has not considered the national and/or sectoral policies including E+/E- policies when establishing the baseline Scenario in Part II B.4 section of webhosted SSC-PoA-DD</p>	B.4.4	<p>The baseline is identified based on para 6 of methodology AMS III.AV, version 02. As per para 44 of EB 65, annex 5, the national and/or sectoral policies or regulations are considered i.e National Rural Drinking Water Programme promoted by Government of India. However the baseline will be determined based on the survey conducted for each CPA.</p>	<p>The CME has revised the Part II B.4 section in the revised PoA DD which considers the E+/E- for establishing the baseline scenario. This is in accordance with the guidelines to complete the PoA DD hence the validation team accepts the correction and CAR is closed</p>
<p>CAR 54 Key assumptions</p> <p>The key assumptions and the rationale used for determining the baseline scenarios are not justified in the Part II B.4 section of webhosted SSC-PoA-DD</p>	B.4.6	<p>In accordance with the methodology AMS III.A.V, Low greenhouse gas emitting water purification system, version 02. EB 62, for a simplified and standardized approach it is assumed that fossil fuel or non-renewable biomass (NRB) is used to boil water as means of water purification in the absence of the project activity.</p> <p>For each CPA baseline survey will be conducted to determine</p> <ol style="list-style-type: none"> 1. Total project population 2. Average number of person in households 	<p>The CME has justified the assumptions considered for establishing the baseline scenario in accordance with the AMS III AV version 02 and has also mentioned the survey parameters to demonstrate the baseline scenario in the revised PoA DD hence validation team accepts the corrections and CAR is closed</p>



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		3. Types of fuel used for boiling 4. Types of stoves in place 5. Method of purification of water practised 6. Access to safe drinking water 7. Average volume of drinking water per person per day The same has been incorporated in section B. 4 of Part II in revised PoA DD,.	
CAR 55 Variables, parameters, data sources for establishment of baseline scenario is not described and explained in the Part II B.4 section of webhosted SSC-PoA-DD	B.4.7	For each CPA baseline survey will be conducted to determine <ol style="list-style-type: none"> 1. Total project population 2. Average number of person in households 3. Types of fuel used for boiling 4. Types of stoves in place 5. Method of purification of water practised 6. Access to safe drinking water 7. Average volume of drinking water per person per day In accordance of AMS III. AV. the variables, parameters used for determining the baseline	Variables, parameters, data sources for establishment of baseline scenario are described and explained in the Part II B.4 section of revised PoA-DD in accordance with the AMS III AV version 02 hence validation team accepts the correction and CAR is closed



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>scenario are (1) quantity of purified water (QPWy), (2) the fraction of woody biomass used in the absence of the project activity that is non-renewable (fNRB,y), and (3) the efficiency of the water boiling system (η_{wb}).</p> <p>The same has been incorporated in section B.4 of Part II in revised PoA DD.</p>	
<p>CAR 56 Eligibility criteria</p> <p>The eligibility criterion mentioned in the Part II B.5 section of webhosted SSC-PoA-DD are not consistent with the eligibility conditions mentioned in the section B.2 of part I (please refer CAR 13-19)</p>	B.5.1	<p>The eligibility criteria described in section B.5 of part II is made consistent with eligibility criteria mentioned in section B.2 of Part I in PoA DD.</p> <p>Please refer to section B.2 of Part I and B.5 of Part II of revised PoA DD.</p>	<p>The eligibility criterion in section B.5 part II and B.2 of Part I are consistent in revised PoA DD in accordance with the EB 67 annex 30 hence validation team accepts the correction and CAR is closed</p>
<p>CAR 57 Leakage emission calculations</p> <p>The Part II section B.6.1 of webhosted SSC-PoA-DD calculations for leakage emissions are not in accordance with the AMS I E version 04</p>	B.6.1.1	<p>The leakage emissions is in accordance with the relevant procedures AMS III.AV which refers to para 10 (a) of AMS I.E, version 05</p> <p>The same has been incorporated in section B.6.1 of revised PoA DD.</p>	<p>The section B.6.1 of Part II revised PoA DD describes the calculations for leakage emissions in accordance with AMS III AV version 02 and AMS I E version 05 hence the validation team accepts the correction and CAR is closed</p>
<p>CAR 58 Leakage emission calculations</p> <p>The equations used for the calculating</p>	B.6.1.2	<p>The equations for calculating emission reductions are cross referenced with the</p>	<p>The section B.6.1 of Part II revised PoA DD the</p>



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
emission reductions are not cross referenced with the methodology in the Part II B.6.1 section of webhosted SSC-PoA-DD		methodology in Part II of B.6.1 section of PoA DD. The same has been incorporated in section B.6.1 in Part II of revised PoA DD.	equations used for the emission reductions are cross referenced with the AMS III AV version 02 hence the validation team accepts the correction and CAR is closed
CAR 59 In Part II section B.6.2 of webhosted SSC-PoA-DD the data parameters not monitored during the crediting period are not in accordance with AMS III AV version 02.	B.6.2.1	The parameters to be reported ex ante are described in section B.6.2 in Part II in accordance with AMS III AV, version 02. Please refer to section B.6.2 in Part II of revised PoA DD.	The section B.6.2 of Part II revised PoA DD describes the parameters to be reported ex-ante in accordance with AMS III AV version 02 and EB 67 annex 30 hence the validation team accepts the correction and CAR is closed
CAR 60 Source of data for parameters In Part II B.7.1 section of webhosted SSC-PoA-DD, Source of data mentioned for the following parameters is not in accordance with the AMS III AV version 02 and annex 30 EB 67 <ul style="list-style-type: none"> QWPy N P,y Existence of public distribution 	B.7.1.3.1	The description and source of monitoring parameters is mentioned in accordance with AMS III AV. version 02. Please refer to section B.7.1 of revised PoA DD.	The data source for the parameters is mentioned as "annual survey reports" and "test report" This is in accordance with the AMS III AV version 02 and annex 30 EB 67 hence validation team accepts the correction and CAR is closed.



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>network of safe drinking water</p> <ul style="list-style-type: none"> Water quality 			
<p>CAR 61 Measurement method</p> <p>In Part II B.7.1 section of webhosted SSC-PoA-DD the measurement methods and procedure for all the parameters are not described in accordance with AMS III AV version 02 and annex 30 EB 67</p>	B.7.1.3.3	<p>The measurement methods and procedures for all parameters is described in accordance with AMS III AV, version 02</p> <p>Please refer to section B.7.1 in Part II of revised PoA DD.</p>	<p>The CME has corrected the measurement methods for all the parameters in the revised PoA DD in accordance with the AMS III AV version 02. CME has also described the survey parameters and sampling survey methods in accordance with EB 69 annex 4 and annex 5, hence validation team accepts the correction and CAR is closed</p>
<p>CAR 62 QA/QC procedure</p> <p>In Part II B.7.1 section of webhosted SSC-PoA-DD the "QA/QC procedures": for all the parameters are not described in accordance with AMS III AV version 02 and annex 30 EB 67</p>	B.7.1.3.4	<p>The QA/QC procedures for all parameters are described in accordance with AMS III. AV, version 02. The correction factor is applied for each parameter in accordance with the sampling guidelines.</p> <p>Please refer to section B.7.1 in Part II of revised PoA DD.</p>	<p>The CME has revised the QA/QC procedures for all the parameters. The parameters obtained from the survey reports will apply the correction factor in accordance with EB 69 annex 4 and 5 Hence validation team accepts the correction and CAR is closed</p>
CAR 63 Data uncertainty and data archiving	B.7.2.1	The data collected during the monitoring and	The CME has corrected the



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The monitoring plan is in accordance with the Methodology AMS III AV version 02, however the data uncertainty and data archiving procedures are not mentioned		baseline justification for all the parameters is archived for entire lifetime of PoA (28+2years) and the database is maintained by CME. This data will be used to calculate the emission reduction of the project. The uncertainty in any data will be corrected by applying the alternate adjustment factor depending on the parameters. Please refer to section B.7.2 in Part II of revised PoA DD.	monitoring plan in accordance with the AMS III AV version 02 and the revised PoA DD describes the data uncertainty and data archiving for the PoA hence validation team accepts the correction and CAR is closed
CAR 64 Sampling plan In Part II B.7.2 section of webhosted SSC-PoA-DD the sampling plan is not mentioned in accordance with the Methodology AMS III AV version 02 and Annex 30 of EB 67	B.7.2.2	The sampling plan is mentioned in accordance with methodology AMS III AV, version 02 which refers to relevant sampling requirement of AMS I.E which further refers to "Standard for sampling and surveys for CDM project activities and programme of activities", version 3, Annex 4, EB 69 and "Guidelines for sampling & surveys for CDM project activities and programme of activities", version 02.0, Annex 5, EB 69. Please refer to section B.7.2 in Part II of revised PoA DD.	The CME has revised the B.7.2 section in the PoA DD wherein the sampling plan is described in accordance with AMS III AV version 02 and EB 69 annex 4 and 5 Hence validation team accepts the correction and CAR is closed
CAR 65 MoC The Modalities of Communications (MoC) is	C.1.1	MoC has been submitted along with the supporting documents to validation team.	Validation team verified following documents to



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
not submitted for validation			<p>confirm the Modalities of Communication in accordance with paragraph 53 to 61 of VVS version 02 (EB 65 Annex 4)</p> <ul style="list-style-type: none"> • corporate, personal identity • specimen signatures • employment status • confirmation from the coordinating/managing entity that all corporate and personal details, including specimen signatures, are valid and accurate. <p>Validation team also confirms the (F-CDM-MOC) for latest version 2.1 is used.</p> <p>Validation team after reviewing the MoC confirms that annex 1 signatories are sole focal point entities for the PoA at this stage.</p> <p>Validation team also confirms</p>



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>that the number of focal points are not exceeding 5 as PoA is implemented in INDIA only.</p> <p>After reviewing the supporting documents the validation team accepts the MoC and hence CAR is closed</p>
<p>FAR-1 (Raised for CPA-001)</p> <p>As the technology/equipment supplier of the water purification system is not finalized, PI. clarify how the actual water purification system distributed would comply with the eligibility criteria (c) (i.e. the specification complying with IS Standard 10500:2012, published in May 2012 (h) (i.e. no Official Development Assistance (ODA) being used) and (i) (i.e. The target group of each CPA being rural and/or urban households currently boiling the water for purification was not made clear.</p>		<p>The implementation of the first CPA (real case) is not done. As described in section D.5 of CPA DD, all the relevant documents for the conditions specified in the eligibility criteria will be submitted to the DOE at the time of verification. It will be ensured that CPA inclusion will be only after satisfying all the eligibility criteria in line with eligibility criteria in section B.2 (Part I) and B.5 (Part II) of PoA DD.</p>	<p>The validation team reviewed the response and finds that as the technology/equipment supplier is not fixed yet for the first CPA, the necessary documents can be verified at the time of verification. The verifying DOE shall verify this at the time of verification.</p>