Response to the call for public inputs on the expansion of the usability of the small scale methodology AMS-III.AV "Low greenhouse gas emitting water purification systems"

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CDM Executive Board
Martin Luther King Strasse 8
P.O. Box 260124
D-53153

Dear Members of the Executive Board of the CDM,

South Pole welcomes the approval of this new methodology on water purification systems, which is well standardized and easy to use in general.

However, we would like to submit some suggestions for improvement and revisions to the current version based on our experience and on the discussions we had with various actors in the sector.

1. Appropriateness of the maximum volume of purified water per person per day set at 5.5 liters in equation 1 of the methodology taking into account the baseline defined in the methodology, i.e. use of fossil fuel or non-renewable biomass for boiling water;

In the current proposed methodology, all projects that can show that they are implemented in a rural area where access to improved drinking water is equal or less than 50% are not subjected to a cap for the amount of creditable water per person per day. In other words, baseline emissions are calculated from the entire quantity of water that is purified, based on the assumption that the fuel mix and types of stoves that are used for boiling the water in the baseline would be the same no matter what the total quantity. We think that this is not conservative.

Therefore, we would suggest to have the same cap for the case 1, or to make it simpler to remove the distinction between case 1 and case 2, since the other requirements are similar in both cases.

2. Appropriateness of the threshold proportion of rural population using an improved drinking source specified in paragraph 4 of this methodology.

The current wording of the methodology excludes projects in urban slums from using case 1. If UNFCCC wants to keep the distinction of case 1 and case 2 we suggest to change the wording to "project activities implemented in rural *and urban* areas". However, as mentioned above, if we add a cap to case 1, we don't need to distinguish between projects situated in areas where less than 50% of rural population used an improved drinking-water source. Therefore, in this case there is no discussion on the threshold of 50%.

3. Other issues

Applicability conditions

We think that the applicability conditions 1 and 3 should refer to different standards:

1. This methodology comprises introduction of low greenhouse gas emitting water purification systems to achieve water quality defined in a relevant national standard or guidelines for drinking water quality.
3. It shall be demonstrated that the application of the project technology/equipment achieves compliance with drinking water quality specified in a relevant national standards or guidelines

with the precision that "*In case a national standard/guideline for drinking water quality is not available, the standards/guidelines by the World Health Organization (WHO) or United States Environmental Protection Agency (US-EPA) shall be applied"*

We suggest deleting the reference to the standards, since in most developing countries and LDCs there are no laboratories that could possibly test all the criteria to be met in the WHO standard for drinking quality. Instead, the performance of the systems should be defined in accordance with simpler procedures defined in *WHO: Evaluating household water treatment options: Health-based targets and microbiological performance specifications*, i.e. the performance of the device should achieve a 2 $\log_{10}$ reduction of bacteria, a 3 $\log_{10}$ reduction of viruses and a 2 $\log_{10}$ reduction of protozoa ("protective"). The reference pathogens shall be C. Jejuni, Cryptosporidium, and rotavirus.

This WHO document for the evaluation of the performance of point-of-use water treatment systems has recently been developed by the WHO's network for the promotion of household water treatment. It is essential that the technologies are evaluated according to a risk-based framework outlined in that document. This framework has been developed to inform the development or revision of national or international performance verification programmes. The performance targets were determined by applying the tolerable disease burden (acceptable risk) as set forth in the 3rd edition of WHO Guidelines for Drinking water Quality[1].

Monitoring of the project population

As mentioned above, we suggest having a cap in all cases to be conservative. This cap is expressed in liters/pers/day. Consequently, it is necessary to have a procedure to determine the project population in order to establish the total cap of the project. One device can be used by more than one person (example of a water kiosk able to treat 500 liters per day) or one person can use more than on device (example of the SODIS system, where one person can used more than one bottle per day).

In the current version of the methodology, the total project population shall be established using survey methods. Since transaction costs increase with the amount of surveys to be conducted, we would suggest the following approach: the project population is determined once via surveys at the time of the water purifiers distribution. Then a ratio of the number of persons using the purifier per device is established and doesn't need to be further determined.

The monitoring will consist only in checking that the appliances are correctly functioning.

[1] http://www.who.int/water_sanitation_health/dwq/gdwq3rev/en/index.html

Stove efficiency η_{wb}

We would like to further standardize the methodology by providing default values for other types of fuel and stoves, as suggested in the table below:

Types of stoves and types of fuel	*Default value*
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 gate as well as a chimney	*0.1*
Other systems using woody biomass	*0.2*
Other systems using fossil fuels	*0.5*

In addition, it should be clearly explained how the types of stoves and fuels used shall be established as well as the efficiency of the stove. Both should be established using representative surveys or reference literature. A third option, default values, could be used for efficiency of the baseline stoves.

Default factors for parameter $f_{NRB, y}$

So far, the determination of this factor is one of the main barriers to the implementation of associated projects for the following reasons:

- The procedure for determining f_{NRB} is not clearly specified in the methodologies.
- In many cases, the data availability is not sufficient to derive f_{NRB}.
- The data collection for the determination of f_{NRB} is time consuming, expensive and requires a lot of effort.
- Finally, f_{NRB} is a highly localized factor, so once determined it often cannot be applied widely across a region or country. This in turn increases the transaction costs for associated projects/PoAs. As the methodologies currently stand, f_{NRB} needs to be determined for each project under a PoA. This significantly hinders the mobilization of these small and dispersed mitigation efforts in Africa.

In summary, the definition of f_{NRB} discriminates against countries in Africa and elsewhere that lack the detailed data and resources necessary to compute the factor. Sadly it is precisely these countries that would stand to gain the most from the biomass-related CDM methodologies.

Therefore, we would like to encourage the secretariat to standardize this Non Renewable Biomass factor.

The idea would be either to provide a table with default values of this factor in the methodology, or provide very clear guidance on how to calculate this factor indicating the different sources, such as FOA database.

Thank you for giving us the opportunity to comment on methodology SSC-III.AV.

Sincerely yours,

Sophie Tison, South Pole Carbon Asset Management Ltd.
Christoph Sutter, South Pole Carbon Asset Management Ltd.