Gold Standard for the Global Goals

TEMPLATE

DEVIATION REQUEST FORM

PUBLICATION DATE **14.1.2021**

Version **4.0**

A. To be completed by Gold Standard

1| Decision

1.1 | Date – 13/06/2022

1.2 | Decision

The proposed standardised monitoring approach for the parameter number of users with further modifications is approved as summarised below. The PD shall ensure adherence to the proposed approach described in the deviation request and the applicable requirements as per the decision (paragraph below). The PD shall provide all supporting documentation/evidence at the time of verification (as applicable) to VVB & SC. PD shall note the following;

Applicability:

- The scope of the application of this deviation is, the registered VPAs under PoA 1247 and PoA 7591 while each finishes its current crediting period - whereas any new VPAs added under either PoA will apply the full provisions of the Methodology For Emission Reductions From Safe Drinking Water Supply, as will the existing VPAs when they renew their CP i.e., the deviation only applies to the ongoing application of TPDDTEC to existing SWS VPAs.

Monitoring approach – Handpumps

- Option 1, as mentioned under section 3.1.1 below; conduct annual monitoring surveys for the number of users - a cap of 300 per tap/water source shall be applied.

- Option 2, as mentioned under section 3.1.1 below, with estimating the technical output capacity per day of borehole based on a field test. To cross-check that the borehole is indeed performing as per the design capacity, 5 mins stroke field tests for reliable yield shall be conducted for each season. For reference, the methodology for conducting stroke test – field methodology is provided on page 13 methodology https://nora.nerc.ac.uk/id/eprint/523090/1/OR18060.pdf. The reliable yield may be measured on a sample basis, following section 4.2 |General requirements for sampling of the - Methodology For Emission Reductions From Safe Drinking Water Supply. Where, the yield test results in higher output than the design capacity, the developer shall apply a conservative value i.e., the design capacity for estimation of the number of users for cross-checking with applying a self-imposed minimum cap of 15 L/pp/day monitored total water consumption from the technology.
  Note that the field test-based approach is to cross-check the likely number of eligible users thus user lists shall be maintained as proposed, and a conservative value shall be applied where user lists have more than the estimated users based on field test or design capacity, as applicable.

  The 300 - 400 persons/day per the BA reference values is a range that is physically possible to deliver, but with decreasing probability as the figure gets higher. Achieving the upper end of the range seems improbable for anything other than brief peak periods even for the most well-used and maintained equipment. Therefore, the range between 300 - 400, requires clear, unambiguous and compelling evidence for verification, and should expect higher levels of scrutiny. This could be realised through digital MRV, with the higher scrutiny balanced with reduced operational costs and time savings. The PD is encouraged to consider this option.

- Option 3 – as per the monitoring options outlined in the Methodology For Emission Reductions From Safe Drinking Water Supply.

Protected springs

- Direct user monitoring as proposed by PD below in section 3.1.1 of this document.

The PD shall document the deviation request, its implications, and GS' decision in the appropriate section of the GS PDD and Monitoring Report (as and when applicable).

The validating and verifying VVB shall, through appropriate means at its disposal, evaluate the PoA's compliance with the above condition(s) and provides its opinion in the Validation and Verification Report. SustainCert shall review both the PD's response and the VVB's assessment/opinion of the same and take appropriate steps.

1.3 | Is this decision applicable to other project activities under similar circumstances?

Yes, for other project developers using similar technologies and meets the applicability criteria outlined above.

B. To be completed by the Project Developer/Coordinating and Managing Entity and/or VVB requesting deviation (Submit deviation request form in Microsoft Word format)

2| Background information

Deviation Reference Number	DEV_242	
Date of decision	13/06/2022	
Precedent (YES/NO)	Yes	
Precedent details	Refer to section 1.2	
Date of submission	09/03/2022	
Project/PoA/VPA	Project	Safe Water Supply Projects
	☒ PoA	GS1247 & GS7591
	☐ VPA	Applicable VPAs under the PoAs
Project/PoA/VPA title	GS1247 Improved Kitchen Regimes GS7591 International Programme of Safe Water and Efficient Cooking	
Location of project/PoA/VPA	Burkina Faso Eritrea Ethiopia Gambia Kenya Malawi Mozambique Rwanda Sierra Leone Togo Uganda Zambia Zimbabwe	
Scale of the project/PoA/VPA	☒ Microscale ☒ Small scale ☐ Large scale	
Gold Standard Impact Registry link of the project/PoA/VPA	https://registry.goldstandard.org/projects/details/155 https://registry.goldstandard.org/projects/details/2206	
Status of the project/PoA/VPA	☐ New ☐ Listed ☒ Certified design ☒ Certified project	
Title/subject of deviation	Methods to calculate user numbers for safe water sources under TPDDTEC and GS Methodology for Emission Reductions from Safe Drinking Water Supply	

Specify applicable rule/requirements/methodology and version number	TPDDTEC v1-3.1 – rule not published – SWS cap based on Table 5. Summary of project and comparison parameter estimates, and implications for emission reductions overestimation of borehole SWS projects. ERSDWS – SDWS 2 – Project Technology Description – Capacity of Technology
Specify the monitoring period for which the request is valid (if applicable)	Start date End date
Submitted by	Contact person name: James Walker Email ID: james.walker@co2balance.com
	Organisation: CO2balance UK Ltd
	Project participant: Yes ☒ NO☐
Validation and Verification body (VVB opinion shall be included, where required by the applicable rules/requirements or request is submitted by the VVB).	Yes ☒ NO☐ If yes; VVB name: KBS Certification Services Pvt Ltd Auditor name: Tushar Eknath Chaudhari

3| Deviation detail

3.1 | Description of the deviation:

**Guidance* Use the space below to describe the deviation and substantiate the reason for requesting deviation from applicable rules/requirements. Please include all relevant information in support of the request. You are requested to follow the principles for requesting deviations, given in the Deviation Approval Procedure/ Design Change Requirements.*

3.1.1 | Deviation detail (to be completed by Project developer):

GS1247 and GS7591 include the implementation of safe water supply VPAs. Following the Gold Standard grievance process on the "Potential over-issuance risk from Safe Water Supply projects", CO2balance are requesting a deviation to lay out options for VPAs to monitor and cap user numbers claimed by each VPA. The proposed change is

based on academic literature[1] and the BAMG Report which both recognise that a communal handpump for domestic use can serve up to 500 people. The aim is to agree and standardise approaches taken across both POAs and VPAs under each POA, and is applicable to technologies such as boreholes, wells with handpumps, solar boreholes, protected springs, gravity flow systems, other piped and tap systems. Approaches for monitoring user numbers for different technologies (such as solar desalination plants, and protected springs) will be detailed in relevant VPA-DDs. For projects involving protected springs a separate monitoring approach is detailed below.

The Deviation seeks to add the following to section B.1 of GS1247 and section C.1.4 of GS7591. These options will also be detailed in Appendices to individual relevant VPAs:

Handpumps

VPAs under the POAs can implement 1 of 2 options for projects applying TPDDTEC and 1 of 3 options for projects applying ERSDWS for monitoring and applying user number caps. VPAs reserve the right to apply different options in different monitoring periods, for example if new data or techniques become available within the project.

1. Cap based on Gold Standard Grievance (BAMG) Report of 300 users per pump:

User lists will still be collected, and the figure will be capped at 300 per tap. Any user lists under 300 will apply the monitored user list value. If using this option, Treatment Capacity calculations are not required.

2. Cap based on field tests, conservative assumptions, and other sources:

A referenced average daily output for each technology will be applied. This figure is then divided by the monitored total water consumed from the technology per person per day. A self-imposed minimum cap of 15 L/pp/day[2] monitored total water

[1] Carter, R.C. (2021) *Rural Community Water Supply: Sustainable services for all*, Rugby, UK: Practical Action Publishing pg. 45, table 3.2
[2] Ibid

consumption from the technology will be applied in order to maintain conservativeness. This calculates the maximum number of people that can be served by the technology.

For a borehole the referenced average daily output this is assumed at 6,000 L/day[3,4,5] in the absence of further evidence. The output assumption of 6,000 L/day is taken from the calculation which gives 300 users per pump: 6,000 L/day / 20 L/pp/day = 300. Therefore, it is a conservative assumption and accepted by RWSN, BAMG and GSF. If this Deviation is not successful, CO2balance reserves the right to submit a Deviation with a revised daily output assumption. With the application of cap of 15 L/pp/day, the maximum users per borehole is 400. Therefore, the project will use monitored number of users if below 400 and apply cap (400 users) if monitored number of users if above 400.

If further evidence is available which shows that a borehole can produce over 6,000 L/day then the higher figure can be used in this calculation with supporting evidence up to a maximum of 7,500 L/day. This would give a maximum claim of 500 users (7,500 L/day / 15 L/pp/day = 500 users).

The L/pp/day value is derived from the annual Usage Survey which records the total amount of water collected for all purposes and number of people in the household. This 15 L/pp/day capped value applies only to Treatment Capacity calculations and shall not be used as a value, or reference value, for any other purposes.

User cap (pp) = Total output of technology per day (L/d) / Total water consumption per day per person (L/d/pp)

[3] Gold Standard Foundation Safe Water Supply Grievance, Technical Advisory Committee Grievance Working Group, Investigation Report, 1 October 2020, p28 and p35
[4] https://www.rural-water-supply.net/en/implementation/handpump-overview/139-india-mark-ii
[5] https://www.rural-water-supply.net/en/implementation/public-domain-handpumps/afridev

User lists will still be collected, and the figure capped at the calculated user cap. Any user lists under the calculated cap will apply the monitored user list value.

3. Cap based on data collected by sensor or water meter (ERSDWS):

Digital or analogue sensors or meters will be installed on a minimum 90/10 sample of technologies across a project (homogenous VPAs may be cross sampled). These will provide data on output per technology per day and operational hours.

Output per technology per day (from sensor or meter) would then be divided by the monitored total water consumed from the technology per person per day. A self-imposed minimum cap of 15 L/pp/day monitored total water consumption from the technology will be applied in order to maintain conservativeness. This calculates the maximum number of people that can be served by the technology. The difference between Option 2 and Option 3 is that Option 3 will rely on data received from a sensor or meter, rather than output being based on a conservative consumption. The cap of 15 L/pp/day remains the same.

This 15 L/pp/day capped value applies only to Treatment Capacity calculations and shall not be used as a value, or reference value, for any other purposes.

User cap (pp) = Total output of technology per day (L/d) / Total water consumption per day per person (L/d/pp)

User lists will still be collected, and the figure capped at the calculated user cap. Any user lists under the calculated cap will apply the monitored user list value.

Protected Springs: Direct User Monitoring

Biennial verification of user numbers through directly monitoring water collection from protected springs. A minimum of a 90/10 sample of protected springs will be visited by field staff/data collectors. The number of users at each protected spring distribution point will be monitored over the course of three consecutive days.

Each user will be asked for their name, number of litres collected (estimate if not clear), and the number of people in their household that the water will serve. Every spring shall be monitored biennially, with first monitoring activity taking place prior to first verification. The data collected will be used to gain an average number of users per protected spring which will be compared to the user list database. If the monitored number of users is found to be lower than the user list database then a corresponding adjustment shall be made to the number of users claimed in emission reduction calculations provided for verification, and thus total project technology days claimed.

3.1.2 | VVB opinion (to be completed by VVB, if applicable):

See supporting document "Design Change FVR_clean".

3.2 | Assessment of the deviation:

**Guidance* Use the space below to describe how the deviation complies with the requirements, and, where applicable, the accuracy, completeness and conservativeness is ensured. Please include all relevant information in support of the request.*

3.2.1 | Deviation assessment (to be completed by Project developer):

a. Additionality

   In line with Section B of the POA-DDs, demonstration of additionality will be demonstrated in each VPA-DD. POA Level additionality is included in section C (GS1247) and Section B.1 (GS7591) of the POA-DDs and proven in line with Section 4.1.2 of POA Requirements. All VPAs included in the POA shall demonstrate additionality as set out in the GS4GG Principles and Requirements.

   There is no impact on Additionality.

b. Applicability of methodology and other methodological regulatory documents with which the project activity has been certified

   In line with POA-DD Section B.3. of GS7591 and Section B.2 of GS1247, safe water supply projects under the POA will apply GS Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC) or GS

Methodology For Emission Reductions From Safe Drinking Water Supply (ERSDWS).

In line with Rule Update "Application of TPDDTEC Methodology to Safe Water Supply Projects" (03/05/2021) Section 3.1.1 the POA and VPAs shall continue to apply registered TPDDTEC methodology version until crediting period renewal.

c. Compliance with the monitoring plan and the applied methodology

Sampling for monitoring will be carried out in line with requirements in the relevant methodology (TPDDTEC or ERSDWS). Detailed monitoring plans will be included in each VPA-DD. Projects under both methodologies will continue to monitor all parameters associated with data collection, calculating user number and water consumption. The request seeks to go beyond the requirements in the monitoring plan and applied methodologies by collecting more data to accurately calculate user numbers and treatment capacity

The request essentially seeks to detail how Treatment Capacity (monitored parameter under Section A.3.5 TPDDTEC v.3.1 and Section 4.1.b ERSDWS) will be captured and impact the total users that can be claimed by the project at the request of Sustain-Cert.

This will require an update to the monitoring plan and monitored parameters for Options 2 or 3 presented in the request (detailed above) to include:

- Output per technology per day
- Total water consumed per person per day

Projects including protected springs will require an update to the monitoring plan to include the direct user monitoring approach and Spring Users parameter.

d. Level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the registered monitoring plan

All VPAs will comply with the monitoring requirements set out in the POA-DD and relevant methodology (TPDDTEC or ERSDWS). The request will update the monitoring plan related to the Treatment Capacity monitored parameter in the methodology and will be effective at the VPA level by an Appendix added to relevant VPAs.

e. Project Scale (note suppressed demand rules for large scale)

GS1247:

In line with the POA-DD, all VPAs included under POA 1247 will be micro-scale VPAs, and as such will be capped at 10,000tCO2e/year.

GS7591:

In line with the POA-DD, ERs from all VPAs included under POA 7591 will be capped as per POA-DD:
Type (ii) projects 60GWh/yr
Type (iii) projects 60,000tCO2e/yr

There is no impact on Project Scale.

f. Stakeholder feedback on design change

Deviation Request/ Design Change has been requested by Sustain-Cert and therefore no stakeholder feedback has been sought.

3.2.2 | VVB opinion (to be completed by VVB, if applicable):

See supporting document "Design Change FVR_clean".

3.3 | Impact of the deviation:

**Guidance* Use the space below to describe the impact of the deviation on project design, safeguarding principles assessment, SDG assessment, emissions reductions, monitoring frequency, data quality, potential risk or any other relevant aspect of the*

project. Please substantiate the impact assessment with relevant and verifiable data/information.

3.3.1 | Impact assessment (to be completed by Project developer):

a. Sustainable Development Assessment

In line with the POA-DDs, the Sustainable Development Assessment will be undertaken at a VPA level.

There is no impact on Sustainable Development Assessment

b. Safeguarding Assessment

In line with the POA-DDs, a safeguarding assessment will be carried out at VPA level.

There is no impact on the Safeguarding Assessment procedure.

c. Legislation

All VPAs will demonstrate compliance with local laws as required by Gold Standard at VPA level.

The host country may have a separate policy which states an aspirational target for users per handpump/borehole. The SWS Programme works with local governments in the project areas to bring safe water to as many people as possible and aims to expand in order to meet targets set out in the relevant policy.

This will be added to Host Country Requirements section of each POA-DD (GS1247 Section B.2; GS7591 Section A.4).

d. Emission Reductions

The proposed method will increase emission reductions in line with the technical specifications of the technology and in line with literature and the BAMG Report. The increase in emission reductions will be conservative as the proposed method only allows for a maximum claim of 400 users, rather than the actually upper limit of 500 users.

e. Monitoring Frequency and Data Quality

The proposed method increases monitoring beyond what is required in the methodology and VPA-DDs.

3.3.2 | VVB opinion (to be completed by VVB, if applicable):

See supporting document "Design Change FVR_clean".

3.4 | Documents:

**Guidance* List of documents provided (note that once a decision has been made by Gold Standard, this deviation form along with supporting documents will be made public on the Gold Standard website. If any of the supporting documents are confidential, please indicate here to ensure they are omitted.)*

Design Change FVR_clean.