

TEMPLATE

# DEVIATION REQUEST FORM

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PUBLICATION DATE **11.04.2022**

Version **5.0**

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## A. To be completed by Gold Standard

### 1| Decision

#### 1.1 | Date – 15/09/2022

#### 1.2 | Decision

The applied deviation is **approved** exclusively for the first monitoring period (i.e., 12/05/2020- 31/05/2022). The PD shall conduct the water quality testing as per the quarterly frequency stated in the applied methodology [TPDDTEC version 3.1](#) in the subsequent verifications.

If the PD anticipates non-compliance with the quarterly monitoring frequency for the mentioned parameter in subsequent monitoring periods as well, the PD may opt for a design change before the next verification and update the monitoring plan as per the latest methodology [Emission Reductions from Safe drinking water supply v.1.0](#) which requires the water quality test to be done annually instead of quarterly.

PD shall document the deviation request, its implications, and GS' decision in the appropriate section of the Monitoring Report. The verifying VVB shall, through

appropriate means at its disposal, evaluate the Project's compliance with the above-mentioned conditions and provides its opinion in the 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?**

No

**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_298	
Date of decision	15/09/2022	
Precedent (YES/NO)	No	
Precedent details	N/A	
Date of submission	19/08/2022	
Project/PoA/VPA	Project	ID – GS11010
	<input type="checkbox"/> PoA	
	<input checked="" type="checkbox"/> VPA	
Project/PoA/VPA title	GS7591 VPA 37 Zambia Western Province Safe Water Project	
Date of listing	05/02/2021	
GS Standard version applicable	Gold Standard for the Global Goals	
Date of transition to GS4GG (if applicable)		
Date of transition to Gold Standard from another standard (e.g. CDM) (if applicable)		
Date of design certification/inclusion (if applicable)	23/09/2021	
Location of project/PoA/VPA	Western Province, Zambia	
Scale of the project/PoA/VPA	<input type="checkbox"/> Microscale <input checked="" type="checkbox"/> Small scale <input type="checkbox"/> Large scale	
Gold Standard Impact Registry link of the project/PoA/VPA	<a href="https://platform.sustain-cert.com/public-project/2283">https://platform.sustain-cert.com/public-project/2283</a>	
Status of the project/PoA/VPA	<input type="checkbox"/> New <input type="checkbox"/> Listed <input checked="" type="checkbox"/> Certified design <input type="checkbox"/> Certified project	
Title/subject of deviation	Deviation of Water Quality Requirement due to Exceptional Circumstances	
Specify applicable rule/requirements/methodology, with exact paragraph reference and version number	TPDDTEC version 3.1 Section E: <b>"Water quality testing:</b> Water quality must be tested every quarter, with the first test within 6 months of the stated project start date."	

Specify the monitoring period for which the request is valid (if applicable)	Start date: 12/05/2020      End date: 31/05/2022
Submitted by	Contact person name: Serena Coccioli Email ID: <a href="mailto:serena.coccioli@co2balance.com">serena.coccioli@co2balance.com</a>
	Organisation: CO2balance
	Project participant: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Validation and Verification body (VVB opinion shall be included, where required by the applicable rules/requirements or request is submitted by the VVB).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  If yes; VVB name:  VVB Staff name(s):
Any previous deviations approved for the same project activity/PoA/VPA(s)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

### 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):

The methodology 'Technologies and Practices to Displace Decentralised Thermal Energy Consumption' (TPDDTEC) version 3.1 states in Section E, "water quality must be tested every quarter, with the first test within 6 months of the stated project start date". The aim of this request is to deviate from this methodological requirement due to our partner being unable to meet this, for reasons described below.

193 boreholes were rehabilitated during this monitoring period. 184 of these received their initial test within 6 months, satisfying the methodological requirement. 9 boreholes did not meet this requirement. Water quality testing for all 193 boreholes did not occur quarterly after their initial water quality test.

The reason for failing to meet the requirement was a combination of the rainy periods that prevented access to certain boreholes at the time of water quality tests (WQTs) and the change of our in-country partner where there were some difficulties obtaining data during the transition between 2021 and 2022.

As 95% of the boreholes did satisfy the requirement for an initial test within 6 months and the amount of testing carried out by the project partner increased thereafter, we are confident that the steps we have taken (described in section 3.2.1) warrant the acceptance of this deviation request.

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

*\*Guidance\* If required by SustainCERT or Gold Standard for this particular deviation, please add here the VVB's opinion.*

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### 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):

As the reasons for failing to meet the requirement are unexpected (described in 3.1.1), our aim is for our remediation steps to be considered appropriate.

Although not all boreholes satisfied the methodological requirement of the first water quality test falling within the first 6 months, 95% of the boreholes during this monitoring period did meet the requirement. The 9 boreholes that did not receive their initial water quality test within 6 months, did receive these tests within one year of their start date (see Table 1). All these initial water quality tests passed. Even though these were passes, since they did not meet the requirement, we decided not to credit for the duration until their first water quality test, more than 6 months of potential crediting. This ensures conservativeness.

**Table 1** Boreholes that did not achieve initial water quality tests within 6 months of their start date (date of rehab) achieve their initial WQT within one year.

Borehole ID	Date of Rehab	Date of Initial WQT
KA000331	14/05/2020	24/01/2021
KA000285	14/05/2020	24/01/2021
NKE01873	14/07/2020	01/03/2021
KA001874	15/07/2020	01/03/2021
KA001882	21/07/2020	01/03/2021
LUA01918	13/08/2020	01/03/2021
LUA01920	13/08/2020	01/03/2021
LUA01927	17/08/2020	01/03/2021
NKE02063	17/09/2020	10/05/2021

As per the methodology, the monitoring frequency of quality of the treated water must be quarterly. Moving forward, our target is to test water quality in quarterly batches so that each borehole is tested once per year. Our target was not met by our project partner in this monitoring period due to the reasons described in section 3.1.1. Despite this, the project partner increased water quality testing towards the end of the rainy season and after to make up for the shortfall. This period is when boreholes are more likely to be contaminated and therefore, a passed WQT gives a good indication that the water quality would have been sustained during the rainy period.

In 2021, a total of 278 WQTs were carried out. These were not necessarily distributed evenly across each quarter. The total WQTs of the project show a 98% Pass and 2% Fail rate. This further provides evidence that despite the uneven distribution of testing throughout the year in quarterly batches, the water quality in the project is safe for drinking and is consistently monitored for all boreholes.

The methodology TPDDTEC version 3.1 states in Section E: "at least once every two years, accredited laboratories must perform the water quality testing". We exceed the expectations of this requirement as all our water quality tests are carried out by accredited laboratories locally. This ensures accuracy and completeness of the data collected. This further provides evidence that although the quarterly requirement was not met, the steps that we have taken comply with ensuring accurate, complete and conservative data.

As the new in-country project partner adjusts to the new schedule, navigating the current unpredictable and more intense weather conditions in the project area during the rainy season, we expect the quarterly testing to improve to ensure that all boreholes are tested at least once per year. This may take time and it cannot be guaranteed that the WQT targets will be achieved for certain during the beginning of the next monitoring period (MP2).

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

*\*Guidance\* If required by SustainCERT or Gold Standard for this particular deviation, please add here the VVB's opinion.*

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### 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):

The project design remains unchanged as the partner aims to satisfy the WQT requirement for future monitoring periods where boreholes are tested in quarterly batches, with all receiving one WQT per year. The exceptional circumstances that resulted in failing the requirement are not expected to prevent this for MP3 but may affect the beginning of MP2 as the project partner improves their WQT programme to meet our target.

Despite quarterly tests for this monitoring period not being consistent, the quality of the data is ensured as the number of boreholes sampled satisfy the requirement that "the 90/10 precision rule must be followed in calculating the sample size required for testing water quality" as set out in section E of the methodology. The minimum sample throughout each quarter of the monitoring period is 6 as shown below in the CDM Random Sample calculator. All the quarters exceed this amount, further highlighting that the quality of the data sampling has not been compromised.

<b>Sample Size Determination for a Proportion Parameter</b>	confidence/precision criterion
Survey design: Simple random sampling	90/10
Calculation method: Precision via confidence interval	

<b>Instruction for using this calculator</b>	
Input information in cells coloured in orange	
Outputs are displayed in cells coloured in green	

Input	Value	Notes
Expected proportion, p	0.98	enter on a decimal scale
Confidence level	90%	e.g. for 90% enter 90
z multiplier	1.645	determined by confidence level
Relative precision	10%	e.g. for 10% enter 10
Population size, N	193	
Predicted sample size, n	6	rounded up to nearest integer

The Gold Standard safeguarding principles are adhered to and the WQT passes provide further evidence that delaying the water quality testing for 9 boreholes and not achieving the quarterly targets did not detrimentally impact the communities that relied on those boreholes. Not crediting for the duration of the months until the first WQT for each borehole is highly conservative and therefore, the emission reduction (ER) figure is lower than the amount that could have potentially been achieved, had the same pass occurred within the 6 month time frame.

The partner is gradually increasing the amount of WQTs they perform across the project and are becoming better at testing quarterly. The partner is making up for the shortfall and have demonstrated that they are capable of carrying out consistent WQTs however, the obstacles mentioned in section 3.1.1 demonstrate why achieving the target is delayed. This has not negatively impacted the communities involved and respects Principle 3 – Community Health, Safety and Working Conditions.

The project still adheres to all of the Gold Standard principles, including “Environmental integrity: Gold Standard certified products e.g. GS VERs and/or statements shall not be overestimated as a result of the deviation, and conservativeness must be ensured”. As mentioned in section 3.2.1, the steps we have taken result in a very conservative figure of the ERs. Even though initial water quality tests are not within 6 months, they are done within one year and since these are passes, it is likely that the quality of the water was a pass throughout that period. The period that an increased number of tests were taken showed that despite the possible contamination from heavy rainfall, the boreholes passed their tests. This gives an



even better indication of the quality of water as it is at a time of extreme stress on water quality.

Carbon finance is necessary to achieve the WQT programme carried out by the in-country partner. Although the monitoring period WQTs do not meet the requirement set out in Section E of the methodology, accepting this deviation request would enable the project to provide funding to further improve the current WQT programme and ensure that future monitoring periods meet the methodological requirement.

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

*\*Guidance\* If required by SustainCERT or Gold Standard for this particular deviation, please add here the VVB's opinion.*

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### 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.)*

Version number	Release date	Description
5	11.04.2022	Additional information added: <ul style="list-style-type: none"> <li>- date of listing, design certification, transition</li> <li>- standard version</li> <li>- specific reference to a requirement deviated from</li> <li>- any previous deviations/design changes approved</li> </ul> Guidance on VVB opinion
4	14.01.2021	
3	16.07.2020	
2	03.05.2018	
1	01.07.2017	Initial adoption