



# DEVIATION REQUEST FORM

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PUBLICATION DATE **11.04.2021**

Version **5.0**

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## A. To be completed by Gold Standard

### 1 | Decision

#### 1.1 | Date – 03/04/2024

#### 1.2 | Decision

The Deviation request is approved based on the project's adherence to national standards, ensuring the safety of drinking water supplied by the community centers, and addressal of practical challenges without compromising the integrity of the project's data or emission reduction outcomes.

The approval of this deviation request is specifically valid for Monitoring Period 1 (MP-1) only. The project developer shall ensure that from Monitoring Period 2 (MP-2), testing for arsenic, viruses, and protozoa is conducted for at least 1 CWT, which will be chosen as per sampling requirements to establish that water supplied from CWT is safe for drinking.

The verifying VVB shall, through appropriate means at its disposal, evaluate the project's compliance with the above-mentioned conditions and provide its opinion in the Verification Report.

SustainCert shall review both the project developer's response and the VVB's assessment/opinion of the same and take appropriate steps.

Note – The project developer shall note that the decision is based on the information provided in the deviation request form and only against the applicable standard requirement quoted in the form below by the developer. The project developer shall comply with all other applicable standard requirements until unless specifically mentioned in the deviation decision.

**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

Removall, which is the project developer for community safe drinking water technology (CWT) is planning to develop a project as per the GS4GG methodology 'Emission Reduction from Safe Drinking Water Supply, version 1.0'. The implementation partner for the project is Naandi Community Water Services Private Limited (NCWS). The project will be implemented across 5 different states of India (Rajasthan, Andhra Pradesh, Haryana, Telangana, and Karnataka). The project is retroactive in nature and under the project activity, 17 community centres are currently operational. The project developer aims to establish 60 community centres under the project activity. The water centres will provide safe drinking water to the rural households located in the vicinity of the community centres.

Deviation Reference Number	DEV_629	
Date of decision	03/04/2023	
Precedent (YES/NO)	No	
Precedent details	NA	
Date of submission	31-02-2024	
Project/PoA/VPA	<input type="checkbox"/> Project	ID – GS12615
	<input type="checkbox"/> PoA	ID – GSXXXX
	<input type="checkbox"/> VPA	ID – GSXXXX
Project/PoA/VPA title	NA	
Date of listing	NA	
GS Standard version applicable	Gold Standard for the Global Goals (GS4GG)	
Date of transition to GS4GG (if applicable)	NA	
Date of transition to Gold Standard from another standard (e.g. CDM) (if applicable)	NA	
Date of design certification/inclusion (if applicable)	NA	
Location of project/PoA/VPA	India	
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	NA	
Status of the project/PoA/VPA	<input checked="" type="checkbox"/> New <input type="checkbox"/> Listed <input type="checkbox"/> Certified design <input type="checkbox"/> Certified project	
Title/subject of deviation	Deviation from one of the applicability conditions specified of the Gold Standard Impact Quantification Methodology	
Specify applicable rule/requirements/methodology, with exact paragraph reference and version number	Deviation from the applicability condition 2.2.1 (h) of the Gold Standard 'Methodology for Emission Reduction from Safe Drinking Water Supply, version 1.0'	
Specify the monitoring period for which the request is valid (if applicable)	Start date	End date
Submitted by	<b>Contact person name:</b> Inès Suliman	
	<b>Email ID:</b> ines.suliman@removall-carbon.com	
	<b>Organisation:</b> Removall	
	Project participant: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

<p>Validation and Verification body (VVB opinion shall be included, where required by the applicable rules/requirements or request is submitted by the VVB).</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>If yes; VVB name:  VVB Staff name(s):</p>
<p>Any previous deviations approved for the same project activity/PoA/VPA(s)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>

### 3 | Deviation detail

#### 3.1 | Description of the deviation:

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

One of the applicability conditions of the GS4GG methodology 'Emission Reduction from Safe Drinking Water Supply, version 1.0' para 2.2.1 (h) mandates each CWT or CWS to comply with the national standard for microbial quality, chemical contamination, physical and aesthetic aspects. The community centers are being implemented in India, therefore at the start of crediting period, the project needs to demonstrate compliance of all the 17 operational community centers (which will be credited under the 1<sup>st</sup> MP) with IS 10500:2012 (Indian Standard for Drinking Water as per BIS specifications).

Project developer has conducted the water quality test for all parameters for the 17 CWT as per the National standard for microbial quality, chemical contamination, physical and aesthetic aspects except for three parameters i.e. Arsenic (a chemical contaminant), Viruses and Protozoa (microbial contaminants). The reason for that are as follows:

- As per [WHO report](#), the states where the project is implemented/planned to be implemented are not affected by arsenic contamination of groundwater above the permissible level. Additionally, testing Arsenic is costly which increases the overall cost of the project.
- For virus and protozoa testing, there are a very few accredited laboratories in India that test the water for these contaminants, thereby making the testing process expensive (the project developer will also have to bear the additional

cost related to the storage and transportation the water samples to these accredited laboratories).

All the community centers are uniform in their technological specifications. The community water centers are effective against these contaminants because as a part of the water treatment process the following steps are used:

**a) Reverse Osmosis:** Reverse Osmosis is a process that is very effective in removing heavy metals such as Arsenic<sup>1</sup>.

**b) UV treatment:** The UV lamps kill all kinds of microbes present in the water (including viruses and protozoa). The UV treatment process is very effective against all kinds of microorganisms<sup>2</sup>.

Equipment specifications for fully automated 1000 LPH RO for the raw water TDS upto 3000 ppm

S.No	Description of Material	Make	Specification	QTY
1	RO Skid	Fabricated	SS 304	1
2	Raw Water Pump	CRI /Kirloskar/ Leo	2 m3/hr and 30 Mtrs Head	1
3	10 Micron Filter housing + Filter	Filter Concept/Gopani/ MMP	Size:20" x 2.5"	1
4	5 Micron Filter housing + Filter	Filter Concept/Gopani/ MMP	Size:20" x 2.5"	1
6	High Pressure Pump	Grundfos / Leo / Lubi	2 m3/hr and 240mtrs Head, MOC:SS 304	1
7	Dual Media Filter	Aventura/ Equivalent	Size:16" Dia x65" Long	1
8	Multiport Valve with distribution	UKL	25 NB	1
9	Membrane	Hydranautics	4040	6
10	Membrane Housing	UKL/Wave cyber/Equivalent	End Port, 4" x 80" (suitable for 2 membrane)	3
11	Rota Meter (Product & Reject Water)	USS / Equivalent	Moc: PP	2
12	Pre. Gauges	Waree (Baumer) / Forbmarshel	SS (G.Filled)2 ½" dial flush panel	4
13	Dosing Pump for Anti-Scalent. & TDS correction	Edose / UKL / Miltonroy / Equivalent	SLPH@ 4 kgcm2	2
14	Dosing Tanks	HDPE / PVC / PP	Size: 50 Ltrs cap	2
15	CIP System	CIP Tank 100 ltrs with Piping		1 set
16	IOT system	Embank/ Equivalent	Control panel, Pressure transmitters (2 Nos), Flow sensors (2 Nos), Solenoid valve (1 no), Tank level controls (2 No's).	1 unit
17	UV System	Alfa / Sukrut / Equivalent	Moc: SS304, Bulb: Philips (1500 LPH)	1
18	Pipe & Fittings	CPVC & UPVS – Nandi/Supreme / Ashirvad/Astral make	Low Pressure side UPVC and High pressure side CPVC and Internal piping UPVC for commissioning purpose.	1 Lot
19	Frontal Piping for MMF	U-PVC		1 Lot
20	Taps	Supreme /Ashirvad/ Astral make	UPVC	3
21	5 Micron Cartridge Filter	Gopani / Filter Concept	2.5" dia x 20" long	1
22	10 Micron Cartridge Filter	Gopani / Filter Concept	2.5" dia x 20" long	2
23	Voltage stabilizer	Servo / Standard make	5Kva ,Single phase	1
24	Water meter (totalizer manual)	Dashmesh /Kranthi	1" inlet/outlet	2

Considering the above, the project developer would like to propose an alternative. For the three parameters – Arsenic, Virus, and Protozoa, it is acceptable to test water only from 1 CWT to establish that the supplied water is safe for drinking. With the same technical specification for all CWT, getting one center tested will demonstrate that these three contaminants are well within their permissible range for all the community centers (as per IS 10500-2012).

<sup>1</sup> <https://www.sciencedirect.com/science/article/pii/S2405844023014536>

<sup>2</sup> <https://www.sciencedirect.com/science/article/abs/pii/S004313540500610X>

Additionally, the project developer will ensure that from MP-2, these three parameters (Arsenic, Virus, and Protozoa) are tested for at least 1 CWT, which will be chosen randomly to establish that water supplied from CWT is safe for drinking.

The project developer further backs its request of deviation by stating that the technology employed under the project activity is effective against these 3 contaminants, therefore, there is a very remote possibility of the dispensed water (from the community center) not complying with the permissible levels specified in the Indian standard (IS 10500-2012).

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

NA

### **3.2 | Assessment of the deviation:**

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

To demonstrate adherence to the applicability condition 2.2.1(h) outlined in the GS4GG methodology, the project developer will conduct water quality testing for all parameters except Arsenic, Virus, and Protozoa for all the CWTs. For the three parameters, the project developer will conduct testing of 1 CWT per monitoring period which will be randomly selected from the population.

With the same technical specification for all CWT, getting one center tested will demonstrate that these three contaminants (Arsenic, Virus, and Protozoa) are well within their permissible range for all the community centers (as per IS 10500-2012).

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

NA

### **3.3 | Impact of the deviation:**

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

The project developer is seeking deviation beforehand hence the deviation will not have any impact on the project. The proposed deviation does not compromise or have any negative influence on accuracy, completeness, or any other requirement of Gold Standard for Global Goals.

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

NA

**3.4 | Documents:**

NA

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