FORM

FORM - DEVIATION REQUEST SUBMISSION

PUBLICATION DATE: 12/11/2024
VERSION: 6.0
NEXT PLANNED UPDATE: 12/11/2026

RELATED DOCUMENTS
– Deviations Approval Requirements and Procedures

CONTACT DETAILS
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1| General Guidelines

1.1 | Applicability

1.1.1 | This form is to be completed for projects (project activities/PoAs/VPAs) seeking deviation or is/are at a risk of deviating from any applicable requirements, GS4GG-specific requirements listed in the applicable Methodologies or any other deviations occurring in any of the various aspects of the project.

1.1.2 | Refer to the latest version of Deviation Request Requirements and Procedures for detailed information on the procedures and requirements.

1.1.3 | This form can be used in the following instances i.e.,

a. Deviation from GS4GG requirements and/or applicable methodologies prior to submission for certification with GS4GG.

b. Temporary changes to a certified project - which include changes from the registered monitoring plan, the applied methodologies or other standard documents - that are expected **not** to occur beyond a given monitoring period.

1.1.4 | For any permanent changes to a design certified project, the requirements set in Design Change Approval Requirements and Procedures shall be followed.

2| Submission of deviation form

2.1.1 | This form shall be submitted in Microsoft Word (.doc) format to Gold Standard at deviations@goldstandard.org

2.1.2 | Forms with incomplete/inaccurate information shall not be considered for review and shall be returned to the applicant.

3| Implementation of deviation decision

3.1.1 | The decision prescribed in this form shall be considered by the entity applying for deviation for further course of action.

Table of Content

4| Decision summary

To be completed by Gold Standard

4.1 | General information

DEVIATION REFERENCE NUMBER	DEVRQ-180
Date of decision	07/08/2025
Decision	☐ **Approved** [No precondition to apply the deviation decision] ☒ **Conditionally approved** [Decision is subject to compliance with the precondition defined below] ☐ **Not approved** [reason for rejection is provided in decision summary]

4.2 | Decision

4.2.1 | Decision Summary

Request on Deviation - Tool 08 Methodological Tool

The request is approved only for the given monitoring period (01/01/2021 - 30/06/2024).

Request on deviation for on site visiting frequency requirements

Deviation is conditionally approved.

4.2.2 | Directions for the project developer/CME, if applicable

Request on Deviation Tool 08 Methodological Tool

The PD shall submit all technical documentation for verification, including:

1. engine datasheets and load factor curves.
2. justification for export meter reliability.
3. evidence supporting supervisory system failure and timeline for resolution.

Request on Deviation for on-site visiting frequency requirements

1. The Project Developer shall clearly mention in the documentation the inactivity around credit issuance during this period.
2. The Project Developer shall submit evidence of stakeholder engagement for 2023-2024 period to the VVB.

4.2.3 | Directions for the Validation and Verification Body (VVB), if applicable

Request on Deviation – Tool 08 Methodological Tool

VVB must validate the methodology used for estimating $FCH_{4,EL}$, including:

1. Documentation of engine efficiency assumptions (100% load factor, with manufacturer datasheet).
2. Justification that the deviation yields conservative ER estimates.
3. evidence of electricity export meter calibration and integrity.

Request on deviation for on-site visiting frequency requirements:

1. The VVB shall confirm a remote audit was conducted in April 2021.
2. Verify that a physical site inspection was conducted in 2024 as part of this verification to restore full compliance with VVS para 9.3.4.

4.2.4 | Directions for the Gold Standard, if applicable

NA

4.3 | Applicability to other activities

Is this decision applicable to other projects under similar circumstances?[1]	☐ Yes ☒ No
Does this decision set a precedent for future projects with similar circumstances?[2]	☐ Yes ☒ No
Precedent details (if applicable to other activities) N/A	

5| Deviation Request Details

To be completed by the entity requesting deviation - (Project Developer/Coordinating and Managing Entity and/or VVB)

5.1 | Submitted by

☒ Project developer
☐ CME
☐ VVB
☐ Other (specify…)

5.2 | Details of the entity and its representative submitting the form

Item	Information
Name[3] :	Neiber Rodrigues da Silva
Email ID[4] :	neiber.silva@vitalambiental.com.br
Organisation:[5]:	Vital Engenharia Ambiental S/A
Are you an authorized project participant as per the cover letter submitted for this activity?	☒ Yes ☐ No

5.3 | Background information

Type	☒ Project activity	☐ PoA GSXXXX	☐ VPA

[1] If this is marked yes, this means that any other project (PoA/VPA/PA) in similar situation may apply the decision of this deviation to their project as well. The project developer/VVB may quote this deviation decision in the relevant certification documents. This is relevant to only the projects which have already entered the certification cycle with GS4GG.
[2] If this is marked yes, it means the decision is valid to all the future projects which will enter the certification cycle with the similar situation. This is relevant to all the projects which are not yet design certified with GS4GG or have not submitted their documents for preliminary review yet.
[3] Name of the individual representing the entity requesting the deviation
[4] Email ID for further correspondence related to the deviation request
[5] The name of the entity requesting the deviation

GS ID	*GS12482*		
Host country(ies)	Brazil		
Project Title	CTR Rosario Landfill Gas Project		
Registry link	**https://registry.goldstandard.org/projects/details/4425**		
Scale	☐ Microscale (GS) ☐ Small scale ☒ Large scale ☐ Other, if applicable please specify below *Insert text here*		
Certification Status and corresponding date of latest status	☒ Listed *07/02/2024*	☐ Certified design	☐ Certified project ☐ Other *If other, specify here*
Applied version of Standard	☒ GS4GG		
	☐ Previous version of Gold Standard	Version no. ☐ 1.0 ☐ 1.1 ☐ 1.2 ☐ 2.2	
Transition date, if applicable	From previous GS version to GS4GG		
	From another standard to GS4GG	*Not transitioned yet*	
	Name of another standard	☒ CDM ☐ Other Name of the Standard – Insert text here	
Applicable activity requirement	☒ Renewable Energy Activity Requirements ☐ Community Services Activity Requirements ☐ Land-use and Forests Activity Requirements ☐ Other *Insert name here*		

5.4 | Project deviation history

Is there any deviation request(s) for the same project activity/PoA/VPA(s) that was submitted to GS previously? If yes, below information.			☐ Yes ☒ No
Reference number	Insert Text here		
Status of the deviation	☐ Approved	☐ Rejected	☐ Under review
Were there any findings (CL, CAR, FAR) raised during any certification step (preliminary review, design and/or performance review etc.) that are relevant to this deviation request?	☐ Yes ☐ No **Summary of the findings** *Summary of the CL, CAR, FAR not more than 200 words. Include reference to document, page number*		

6| Deviation detail

To be completed by the entity requesting deviation (Project Developer/Coordinating and Managing Entity and/or VVB)

6.1 | Standard document reference

Standard document reference	Title	TOOL08 Methodological tool: Tool to determine the mass flow of a greenhouse gas in a gaseous stream Validation and Verification Standard
	Version	TOOL08 - Version 03.0 VVS - Version 1.0
	Paragraph	TOOL08 - Paragraph 13 VVS - Paragraph 9.3.4

6.2 | Description of the deviation

Title	1 - Request a deviation from TOOL08 Methodological tool: Tool to determine the mass flow of a greenhouse gas in a gaseous stream Version 03.0. Paragraph 13. The estimative of methane mass (FCH4,EL) into power plant will be based on the electricity exported to the grid instead of electricity generated by the power plant. 2 - Request a deviation for on site visiting frequency requirements, because the minimum routine of physical site visits was met	
Confirm the nature of changes related to deviation	☒ Temporary (e.g. not expected to occur beyond one monitoring period)	☐ Permanent (e.g. deviation from requirements prior to submission for certification)
	Monitoring period: from 01/01/2021 until 30/06/2024	
Relevant monitoring period, if applicable	Start date	01/01/2021
	End date	30/06/2024
Summarise the changes	1 - Request a deviation from TOOL08 Methodological tool: Tool to determine the mass flow of a greenhouse gas in a gaseous stream Version 03.0. Paragraph 13. The estimative of methane mass (FCH4,EL) into power plant will be based on the electricity exported to the grid instead of electricity generated by the power plant. In the registered monitoring plan described in the PDD, direct monitoring is conducted on the LFG captured, destroyed by flare and used for power generation. The plant monitoring meters are connected through a Programmable Logic Control (PLC) and the monitored parameters are continuously sampled and stored in the plant data logger. Then the information registered is automatically aggregated every minute in a monitored data report.	

- From the entire monitoring period, the supervisory system was not operational due to supervisory system software errors causing the lack of registration of the main data. By the fact that this project activity is under its first verification and no revenues from carbon credits have been generated so far, PP faces barriers and delays on the investments to repair the supervisory system to comply with the described monitoring plan in the PDD

The landfill gas suction and electricity generation systems operated normally, what can be clearly demonstrated by the exported electricity meter[6] data, which has registered all the electricity exported to the grid. For this reason, a temporary deviation from the monitoring plan is being requested for these periods while the plant operated normally but no data was registered by the supervisory system, and emission reductions will be claimed according to a conservative estimative based on the electricity exported using landfill gas.

The estimative of methane mass into power plant will be based on the electricity exported to the grid instead of electricity generated by the power plant, which is greater as it includes the electricity for self-consumption by the plant equipment. The methane fed to the engines will be calculated as follows:

$$F_{CH4,EL} = \frac{EC_{BL} \times (Conversion\ rate\ MWh\ to\ TJ)}{(NCV_{CH4}) \times El.eff}$$

Where:

$F_{CH4,EL}$	=	Amount of methane in the LFG which is used for electricity generation (tCH4)
EC_{BL}	=	Net amount of electricity generated using LFG and exported to the grid during the monitoring period applying deviation (MWh)[7]
Conversion rate MWh to TJ	=	Unit conversion rate from MWh to TJ (0.0036 TJ/MWh)[8]

[6]Electricity meter lifetime calibration. Information presented to DOE.

[7] According to electricity reports provided by the local Electricity Trader Company and Electricity Chamber Company.

[8]According to MIT Units & Conversions Fact Sheet. Source: https://cngcenter.com/wp-content/uploads/2013/09/UnitsAndConversions.pdf, accessed on 07/10/2019.

	NCV_{CH4} = Net calorific value of methane at reference conditions (0.0504 TJ/tCH4) according to ex-ante PDD. *El.eff* = Efficiency of engine, assuming a 100% plant load factor as a conservative approach[9] (39.10%) Then, the emission reductions will be normally calculated according to the methodologies and tools defined in the registered PDD <u>2 - Request a deviation for on site visiting frequency requirements, because the minimum routine of physical site visits was met</u> Regarding Validation and Verification Standard (version 1.0), paragraph 9.3.4, where it is mandatory to conduct an on-site inspection at verification for the design certified project activity if: a. *It is the first verification for the VVB with regard to this project activity;* b. *More than <u>three years</u> have elapsed since the last on-site inspection conducted for verification for the project activity.* Regarding the project activity onsite visits, please see below the timeline of visits: • 21/12/2020 - PHYSISCAL SITE VISIT – CDM Renewal of Crediting Period • 15/04/2021 - REMOTE SITE VISIT DUE TO COVID-19 – CDM Verification • 19/08/2024 - PHYSISCAL SITE VISIT – GS DESIGN AND PERFORMANCE REVIEW Remote auditing, in which documents, equipment and Plant were inspected in real time, instead of on-site visiting was conducted on 15/04/2021 due to COVID-19 restrictions. This means that more than three years have elapsed since the last on-site inspection conducted for verification for the project activity comprehending the period between

[9] As a conservative approach, a 100% load factor and 39.10% efficiency of engine (%) according to group generator data sheet was used in order to lower the calculated volume of CH_4 fed into the group generators.

	2021 and 2024 as referred to the period that PP wishes to issue GS_VERs. The start monitoring period of the project activity has been defined as 12 May 2021 considering submission Preliminary Review, minus two years. In this sense, this document aims to request permission to proceed with the issuance of the carbon credits starting the period in 12 May 2021, whereas the minimum routine of physical site visits was not met due to COVID-19 restrictions applied at that time. Also, between 2021 and 2024, the PP encountered many barriers to operate the carbon credits activities such as verifications, since the UNFCCC stopped operations in 2021. There was no clarity as to when the Regulated Market would return, nor whether it was possible to register a project in two separate standards. These issues were resolved over the course of at least a year through a lot of interaction with the Gold Standard. Before the Preliminary Review process began, there was a STAKEHOLDER PUBLIC CONSULTATION held physically on project site on 28th July 2023, which obviously took time, resources and people. In Jan 2021, voluntary standards were not as relevant as they are today in the market, meaning it was not a trivial choice to go ahead with the transition, and there were many uncertainties along the way.
Reason for deviation	1 - Request a deviation to calculate the estimative of methane mass into power plant based on the electricity exported to the grid instead of electricity generated by the power plant 2 - Request a deviation for on site visiting frequency requirements, because the minimum routine of physical site visits was not met remote due to COVID-19 restrictions applied at that time as well as voluntary market uncertainties faced when transitioning from CDM to GS4GG
Proposed resolution	-
Is there any potential temporary or permanent impact of deviation on other aspects of the project?	Select the relevant area: ☐ Project design ☐ Local stakeholder consultation ☐ Safeguarding principles ☐ SDG assessment ☐ Regulatory compliance ☐ Additionality ☐ Applicability of methodology ☒ Annual emission reduction volume *(if yes, fill the table below)*

	<table><tr><th>Annual emission reduction/removal before applying deviation</th><th>Annual emission reduction/ removal after applying deviation</th></tr><tr><td>140,459 tCO_2e</td><td>74,583 tCO_2e</td></tr></table> ☐ any other matrix, please specify…
Summary of the impact	1 - It is important to highlight that the selected Electrical Efficiency of the engine is the main conservative factor in the equation. The engine datasheet (provided by the manufacturer) presents technical data of the engine operation divided into three Plant Load Factor ranges, 50%, 75% and 100% and PP chosen maximum plant load factor to model the deviation equation. It means that under 100% load factor, the electrical efficiency is the highest and it represents that less methane mass would be necessary to generate the same amount of electricity by the engines. Considering that, it is possible to conclude that the deviation equation is conservative since average engine load factor for LFG electricity generation projects is around 75% and PP is assuming 100% Thus, there is an impact on Emissions Reductions and issuance of the carbon credits between monitored period. The Deviation requested does not impact items below: • Project Design • Safeguarding principles assessment • SDG assessment • Monitoring frequency • Data quality • Potential risk or any other relevant aspect of the project. 2 - The deviation is related to rules specified in Validation and Verification Standard (version 1.0), paragraph 9.3.4, where it is mandatory to conduct an on-site inspection at verification at a maximum of 3-years interval. Thus, there is an impact on Emissions Reductions and issuance of the carbon credits between monitored period.

	The Deviation requested does not impact items below: • Project Design • Safeguarding principles assessment • SDG assessment • Monitoring frequency • Data quality • Potential risk or any other relevant aspect of the project.
Insert text here	

6.3 | VVB information

Is a VVB opinion on the deviation request required? *VVB opinion shall be included, where required by the requirements under Deviations Request Requirements and Procedures or request is submitted by the VVB.*	Yes ☐ No ☒

6.4 | VVB's assessment

The below information is to be completed by VVB, if applicable.

VVB's assessment of deviation request		
VVB's assessment of impact of deviation request		
VVB recommendation		
VVB details	VVB name:	
	Auditor name(s):	
	Email (s):	

6.5 | Documents:

6.5.1 | List of documents provided (*note that once a decision has been made by Gold Standard, this deviation form will be made public on the Gold Standard website. Kindly refrain from including any confidential information in the form.*)

Document 1.

Document 2.

Document n.

DOCUMENT HISTORY

VERSION NUMBER	RELEASE DATE	DESCRIPTION
6.0	12.11.2024	Editorial and structural changes to the template
5.0	11.04.2022	Additional information added: - date of listing, design certification, transition - standard version - specific reference to a requirement deviated from - any previous deviations/design changes approved - Guidance on VVB opinion
4.0	14.01.2021	Editorial changes
3.0	16.07.2020	Editorial changes
2.0	03.05.2018	Editorial changes
1.0	01.07.2017	Initial adoption