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Validation Report

Consorzio Stabile Globus

VALIDATION OF THE REVISED MONITORING PLAN OF:
LANDFILL GAS RECOVERY AND ELECTRICITY GEN-
ERATION AT MTONI DUMPSITE

REPORT NO. 1263674

2009, March 20th

TÜV SÜD Industrie Service GmbH
Carbon Management Service
Westendstr. 199 - 80686 Munich – GERMANY



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Subject: Validation of a Revised Monitoring Plan			
Accredited TÜV SÜD Unit: TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 - 80686 Munich Federal Republic of Germany		TÜV SÜD Contract Partner: TÜV Italia Srl Via Carducci, 125 20099 Sesto San Giovanni (MI) Italy	
Client: Consorzio Stabile Domus		Project Site(s): Mtoni Dumpsite, Dar Es Salaam, United Republic of Tanzania	
Project Title: Landfill gas recovery and electricity generation at "Mtoni Dumpsite", Dar Es Salaam, Tanzania			
Applied Methodology / Version: ACM0001 version 4		Scope(s): 11	
Registered PDD version: Registration Date: 2007-06-02 Starting Date of Crediting Period : 2007-03-01		Revised Monitoring Plan: Date of issuance: 2009-01-16	
Assessment Team Leader: Martin Schröder		Further Assessment Team Members: Luciano Grugni Riccardo Arena	
Summary of the Validation Opinion:			
<input checked="" type="checkbox"/> The review of the revised monitoring plan and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the revised monitoring plan meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the replacement of the monitoring plan of the registered PDD by the submitted revision.			
<input type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the replacement of the monitoring plan of registered PDD.			



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1 INTRODUCTION

1.1 Objective

The validation objective is an independent assessment by a Third Party (Designated Operational Entity = DOE) of a proposed revision of a monitoring plan against all defined criteria set for the registration under the Clean Development Mechanism (CDM). Validation is required in the context of proposed revisions of a registered CDM activity and will finally result in a conclusion by the executing DOE whether a revised monitoring plan is valid and should be submitted for replacing the previous version. The ultimate decision on the registration of a proposed revision rests at the CDM Executive Board.

The project activity discussed by this validation report is registered as CDM activity N° 0908 with the project title:

Landfill gas recovery and electricity generation at “Mtoni Dumpsite”, Dar Es Salaam, Tanzania.

1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. The core requirements on revised monitoring plans are given by annex 12 of the report of EB-31 as referred below:

15. The request for revising monitoring plan is made in cases where:

- a. the monitoring plan in the registered CDM project activity document is found not to be consistent with the approved monitoring methodology applied to the registered project activity; or,*
- b. the proposed revision of the monitoring plan ensures that the level of accuracy or completeness in the monitoring and verification process is not reduced as a result of the revision;*

The validation is not meant to provide any consulting towards the client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

2 METHODOLOGY

The assessment of the revised monitoring plan is based on a document review against the requirements given in annex 12 of the EB 31.

2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body “climate and energy”. The composition of an assessment team has to be approved by the Certification Body ensuring that the required skills are covered by the team. The Certification Body TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL)
- Greenhouse Gas Auditor (GHG-A)
- Greenhouse Gas Auditor Trainee (T)
- Experts (E)

It is required that the sectoral scope linked to the methodology has to be covered by the assessment team.

The validation team was consisting of the following experts (the responsible Assessment Team Leader is written in bold letters):

Name	Qualification	Coverage of technical scope	Coverage of sectoral expertise	Host country experience
Mr. Martin Schröder	ATL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Luciano Grugni	GHG-A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Mr. Riccardo Arena	T	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Mr. Martin Schröder is an Assessment Team Leader appointed by the certification body "climate and energy" of TÜV SÜD. Within the Carbon Management Service he is responsible for the validation and verification of forestry based mitigation projects. Before entering the company, he worked in the field of natural resource management as well as voluntary carbon offset projects.

Mr. Luciano Grugni is an auditor for environmental management systems and JI/CDM at the department “Climate, Energy and Environment” of the Italian branch of TÜV SÜD Group. He has been involved in the topic of environmental auditing, monitoring and verification due to the requirements of the Kyoto Protocol. His main focus lies on emissions trading audits and renewable energies.

Mr. Riccardo Arena is a trainee auditor for environmental management systems at the department “Climate, Energy and Environment” of the Italian branch of TÜV SÜD Group. He has been involved in the topic of environmental auditing, monitoring and verification due to the requirements of the Kyoto Protocol.



2.2 Review of Documents

The revised Monitoring Plan submitted by the client and additional background documents related to further monitoring aspects were reviewed as initial step of the validation process.

2.3 Follow-up Interviews

According and as a result of the document review, TÜV SÜD asked the project participant for some clarifications. Further telephone conferences have been held with the responsible person of Consorzio Stabile Globus discussing the revision of the monitoring plan.

2.4 Internal Quality Control

As final step of a validation, the validation report has to undergo and internal quality control procedure by the Certification Body “climate and energy”, i.e. each report has to be approved either by the head of the certification body or his deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one.

It rests at the decision of TÜV SÜD’s Certification Body whether a revised monitoring plan will be submitted for approval by the EB or not.



3 SUMMARY OF FINDINGS

In the context to plan the First Verification, the Audit team has made following finding based on the available documentation (PDD and draft of the monitoring report) and the information provided by the Project Participants.

The monitoring plan applied complies with the methodology. Nevertheless the PDD did not include in the monitoring plan the total amount of electricity use in the project (both imported from Tanesco and generated by the Diesel engine) and the CO₂ emission intensity of these electricity sources; these parameters have been correctly monitored according to the draft monitoring report and as required by the methodology; therefore the project is in compliance with the methodology applied. A request for revision of the monitoring plan should be submitted before next verification.

The Project owners Response was:

The omission in PDD effectively does not reflect the actual situation which, as requested by the methodology, includes the monitoring of the total amount of used electricity and related emission factors.

According to this description the project participants developed a revised monitoring plan forming the base of the assessment presented herewith.

TÜV SÜD considers the revised monitoring plan as acceptable and reasonable. There is no loss in information as the same meters are used as before for the calculation of the emission reductions. Only the explanation about internal electricity consumption and the relation with the CER calculations and additional information on the monitoring procedure and instrumentation in place and for the ERs computation has been added by project participants.

Consequently it can be confirmed that the level of accuracy or completeness in the monitoring and verification process is not reduced as a result of the revision. Even more the revision provides more details on quality assurance and quality control as given by the registered PDD.

4 VALIDATION OPINION

TÜV SÜD has performed a validation of the revised Monitoring Plan of CDM Project 0908:

Landfill gas recovery and electricity generation at “Mtoni Dumpsite”, Dar Es Salaam, Tanzania

The DOE confirms that, in line with Annex 34/EB26:

- (a) the revision of the Monitoring Plan does not involve any change in the monitoring provisions and systems. The revision has been done in order to provide a more complete information on the data collected; this additional information does not reduce the level of accuracy (which actually does not change) and it furthermore improves the description of the monitoring;
- (b) the additional information contained in the revised Monitoring Plan complies with the applied methodology; the DOE has verified the full consistency of the additional parameters with the prescriptions contained in the methodology. The total amount of electricity imported from the grid (pls. see revised Monitoring Plan - ID number 7) and the total amount of electricity imported from the diesel generator (pls. see revised Monitoring Plan - ID number 9) have been correctly indicated by PPs in terms of data unit, recording frequency and data storage. The respective emission factors (pls. see revised Monitoring Plan - ID numbers 8 and 10) have been also verified to be in compliance with the methodology; in particular, the following tools and assumptions have been used:

Calculation of $CEF_{electricity,y}$:

The parameter has been calculated according to the “Tool to calculate project emissions from electricity consumption (version 01)” – Case A, taking into account the Emission Factor of the local grid ($EF_{grid,y}$) and the transmission and distribution losses (TDL_y) as follows:

Parameter	reference Tool	remarks
Emission Factor of the local grid company ($EF_{grid,y}$)	Tool to calculate the emission factor for an electricity system (Version 01.1)	The value applied is 0.5 tCO_{2e}/MWh ; this has been taken as a Combined Margin based on the specific data available under the CD4CDM excel tool “Grid Emission Factors”. The spreadsheet reports the last available data from TANESCO (local grid company) on thermal power production within the period 2005-2007.
Average technical transmission and distribution losses in the grid in year y for the voltage level at which electricity is obtained from the grid at the project site (TDL _y)	Tool to calculate project emissions from electricity consumption (Version 01)	The value applied is 20%; according to the Tool, this is the default value to be used in case no recent, accurate and reliable data are available within the host country.

It’s confirmed that the tools used are in compliance with the ACM0002 / AMSI.D, which refer to the “Tool to calculate the emission factor for an electricity system” (and, indirectly, related tools in it referred).



Calculation of $CEF_{thermal,y}$:

The parameter has been taken according to the "Tool to calculate project emissions from electricity consumption (version 01)" to be $1.3 \text{ tCO}_2\text{e}/\text{MWh}$. This value correspond to the conservative default value considering the case B3 "electricity consumption from an off-grid captive power plant".

- (c) as no previous verifications have been performed before, no previous findings to be verified were found.

The review of the revised monitoring plan and the subsequent follow-up interviews has provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the revised monitoring plan meets all relevant UNFCCC requirements for the CDM.

Hence TÜV SÜD recommends the replacement of the monitoring plan of the registered PDD by the submitted revision.

Munich, 2009-03-20

Munich, 2009-03-20

A handwritten signature in blue ink that reads "Thomas Klewe".

A handwritten signature in blue ink that reads "Martin Schröder".

Certification Body "climate and energy"
TÜV SÜD Industrie Service GmbH

Assessment Team Leader