VALIDATION OPINION FOR REVISION OF REGISTERED MONITORING PLAN

Shanghai Chuanji Investment Management Co., Ltd.

25.3MW WHR project of Zhejiang Leomax Group

UNFCCC Ref. No. 1874

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Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEF	Carbon Emission Factor
CERs	Certified Emission Reductions
CL	Clarification Request
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
GHG	Green House Gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
MR	Monitoring Report
NCV	Net Calorific Value
PDD	Project Design Document
PP	Project Participant
SGS	Société Générale de Surveillance
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and verification manual

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1. Validation Opinion

Paragraph 57 of the modalities and procedures for the CDM allows project participants to revise monitoring plans in order to improve accuracy and/or completeness of information, subject to the revision being validated by a Designated Operational Entity.

SGS United Kingdom Ltd has been contracted by Shanghai Chuanji Investment Management Co.,Ltd. to perform such a validation of the revision of monitoring plan according to the procedure detailed in annex 34 to EB 26 meeting report; the original monitoring plan is part of the PDD of registered CDM project: 25.3MW WHR Project of Zhejiang Leomax Group and UNFCCC ref.1847. The purpose of a validation is to have an independent third party assessment of the revision of monitoring plan. In particular, the level of accuracy and completeness in the proposed revision of the monitoring plan, and the conformity with approved monitoring methodology applicable to the project activity.

The proposed revision of monitoring plan aims to clear the ambiguity in the registered monitoring plan and to include additional monitoring parameters which were omitted before. By applying the proposed revision of monitoring plan, the average annual energy (fuel) consumption of clinker making process after project implementation $F_{p,y}$ is to be calculated from the directly measured values of fuel consumption ($Q_{fuel,y}$) and net calorific value ($NCV_{fuel,y}$) of the fuel. Oxidation ratio of fuel used in Clinker Production ($OXID_{fuel,y}$) is to be derived from official statistical data 2006 IPCC Guidelines. $EF_{co2,fuel}$ (Emission factor of fuel used in Clinker production) is to be calculated from the directly measured value of $EF_{c,fuel,y}$ (carbon content of fuel).

This revision improves the accuracy of information provided and consistency in the registered PDD and the monitoring plan.

Furthermore, we confirm that:

(a) 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 revisions;

(b) the proposed revision of the monitoring plan is in accordance with the approved monitoring methodology applicable to the project activity.

(c) the findings of previous verification reports have been taken into account.

Signed on Behalf of the Validation Body by Authorized Signatory

Signature: 

Name: Siddharth Yadav

Date: 22nd May 2009

2. Introduction

2.1 Objective

Paragraph 57 of the modalities and procedures for the CDM allows project participants to revise monitoring plans in order to improve accuracy and/or completeness of information, subject to the revision being validated by a Designated Operational Entity.

SGS United Kingdom Ltd has been contracted by Shanghai Chuanji Investment Management Co.,Ltd. to perform such a validation of the revision of monitoring plan according to the procedure detailed in annex 34 to EB 26 meeting report; the original monitoring plan is part of the PDD of registered CDM project: 25.3MW WHR Project of Zhejiang Leomax Group and UNFCCC ref.1847. The purpose of a validation is to have an independent third party assessment of the revision of monitoring plan. In particular, the level of accuracy or completeness in the proposed revision of the monitoring plan, and the conformity with the approved monitoring methodology applicable to the project activity.

The Validation was performed in accordance with the UNFCCC criteria for the Clean Development Mechanism (CDM) and the host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

SGS reviewed the project design documentation, using a risk based approach and conducted follow-up interviews.

2.2 Scope

The scope of the validation is defined as an independent and objective review of the project design document, the project baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against the Kyoto Protocol requirements, the UNFCCC rules and associated interpretations. SGS has employed a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of CERs.

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

2.3 GHG Project Description

25.3MW WHR Project of Zhejiang Leomax Group was registered on 16th March 2009 under UNFCCC ref. 1847. The crediting period for the project is from 16/03/2009 to 15/03/2019.

2.4 The Names and Roles of the Validation Team Members

Name	Role	Affiliate
Niclo Deng Wei	Lead Assessor	SGS China
Ginger Jiang Yuan	Lead Assessor (Trainee)	SGS China
Lenore Yin Lei	Local Assessor	SGS China

Niclo Deng Wei is a lead assessor in scopes 1, 5 for the SGS Climate Change Programme with extensive experience in the validation and verification of CDM and VCS2007 projects in China. He is based in Beijing and has been assigned on the verification of this project.

Ginger Jiang Yuan is a trainee lead assessor for the SGS Climate Change Programme with extensive experience in the validation and verification of CDM and VCS2007 projects in China. She is based in Shanghai and has been assigned on the verification of this project.

Lenore Yin Lei is a local assessor for the SGS Climate Change Programme. She is based in Beijing and has been assigned on the verification of this project.

3. Methodology

3.1 Review of CDM-PDD and Additional Documentation

The validation is performed primarily as a document review of the publicly available project documents. The assessment is performed by trained assessors using a validation protocol.

A site visit is usually required to verify assumptions in the baseline.

3.2 Findings

As an outcome of the validation process, the team can raise different types of findings

In general, where insufficient or inaccurate information is available and clarification or new information is required the Assessor shall raise a **Clarification Request (CL)** specifying what additional information is required.

Where a non-conformance arises the Assessor shall raise a **Corrective Action Request (CAR).** A CAR is issued, where:

I. Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;

II. Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impair the estimate of emission reductions;

III. Issues identified in a FAR during validation to be verified during verification have not been resolved by the project participants.

A Forward Action Request (FAR) is raised during verification for actions if the monitoring and reporting require attention and/or adjustment for the next verification period.

The validation process may be halted until this information has been made available to the assessors' satisfaction. Failure to address a CL/FAR may result in a CAR. Information or clarifications provided as a result of a CL/FAR may also lead to a CAR.

Corrective Action Requests, Clarification Requests and Forward Action Requests are detailed in a separate form (Findings Overview). In this form, the Project Developer is given the opportunity to address and "close" outstanding CARs and respond to CLs and FARs.

3.3 Internal Quality Control

Following the completion of the assessment process and a recommendation by the Assessment team, all documentation will be forwarded to a Technical Reviewer. The task of the Technical Reviewer is to check that all procedures have been followed and all conclusions are justified. The Technical Reviewer will either accept or reject the recommendation made by the assessment team.

4. Validation Findings

4.1 Application of Monitoring Methodology and Monitoring Plan

Monitoring methodology AM0024 version 01 (/4/) dated 30/09/2005 and ACM0002 version 06(/5/) dated 19/05/2006 are applied for the project (/2/).

4.1.1 Description of Revision of Registered Monitoring Plan

The modifications to the registered Monitoring plan are as follows:

1. Table $F_{p,y}$ (the average annual energy (fuel) consumption of clinker making process after project implementation) under section B.7.1

In the registered PDD, it was:

Direct measurement

In the revised MP (/1/), more specific approach has been described as below:

Direct measurement and calculation

The Quantity of fuel consumption ($Q_{fuel,y}$) and Calorific Value of fuel ($NCV_{fuel,y}$) will be measured and used to calculate $F_{P,y}$ as below:

$$F_{P,y} = Q_{fuel,y} \times NCV_{fuel,y}$$

2. Table of $OXID_{fuel,y}$ (oxidation ratio of fuel used in Clinker production) under section B.7.1

In the original monitoring plan, there was no description of parameter $OXID_{fuel,y}$ in section B.7.1.

In the revised MP, monitoring procedures of $OXID_{fuel,y}$ has been added.

3. Table of $EF_{co2,fuel}$ (Emission factor of fuel used in Clinker production) under section B.7.1

In the original monitoring plan, there was no description of parameter $EF_{co2,fuel,}$ in section B.7.1.

In the revised MP, monitoring procedures of $EF_{co2,fuel}$ have been added.

4. Description under section B.7.2.2

In the original B.7.2.2 of the registered PDD, monitoring of $EF_{c,fuel,y}$, $Q_{fuel,y}$ and $NCV_{fuel,y}$ were not described.

They are now included in the revised MP.

4.1.2 Validation of Revision of Registered Monitoring Plan

1. The aforementioned amendment 1 and 4 under 4.1.1 relate to the monitoring of $F_{p,y}$. The revision of MP has been validated as follows:

In the revised MP, the approach in determining $F_{p,y}$ is specified as the product of direct measurements $NCV_{fuel,y}$ and $Q_{fuel,y}$, this is not clear in the original MP. During the site visit, it is found by the verification team that $Q_{fuel,y}$ (the quantity of fuel consumption) is measured by electric scale as per registered PDD. Sales records are available for double check purpose. $NCV_{fuel,y}$ is already included in section B.7.1 of the original monitoring plan as a direct measured parameter which is found to be measured onsite in accordance with relevant national standard GB/T213-2003 (/6/).

2. The aforementioned amendment 2 under 4.1.1 relates to the monitoring of $OXID_{fuel,y}$ which is not specified in the registered monitoring plan section B.7.1. According to the applied methodology AM0024 version 01 and ACM0002 version 06 and the registered PDD, $OXID_{fuel,y}$ is derived from official statistical data and the value of 100% on page 1.23 of 2006 IPCC Guidelines has been used in the PDD for CERs estimation which is in conformance with the applied AM0024 version 01. The monitoring of this parameter in the revised MP is validated to be in accordance with the applied methodology.

3. The aforementioned amendment 3 and 4 under 4.1.1 relate to the monitoring of $EF_{co2,fuel.}$ which is not included in the registered monitoring plan. In the revised monitoring plan, $EF_{co2,fuel}$ will be measured and calculated from the monitored data of $EF_{c,fuel,y}$. During site visit, it is found that the measurement of $EF_{c,fuel,y}$ is to be measured in accordance with the national standards GB/T 212-2001 (/7/), the results of the monitoring data are deemed to be reliable. The actual practise is in compliance with the revised monitoring plan and the revision of the monitoring plan will not reduce the level of accuracy and completeness of this project.

Therefore, it can be concluded that the level of accuracy and completeness in the monitoring and verification is not reduced as a result of the revision of the MP. The actual practice of this project is in line with the revised MP.

4.2 Findings of Previous Verification Reports

No verification reports have been issued for the project. There were no FARs raised during the previous validation process.

Rest of the monitoring plan remains the same as mentioned in the registered PDD available at UNFCCC website http://cdm.unfccc.int/Projects/DB/DNV-CUK1213687702.85/view and revised monitoring plan is attached with the revised validation opinion.

There is no other change in the Validation Report by DNV, dated 23/02/2009 available on UNFCCC webpage http://cdm.unfccc.int/Projects/DB/DNV-CUK1213687702.85/view .

In compliance with Annex34 to EB26 meeting report and relevant sections in the VVM (/8/), it has been validated that this revision of monitoring plan improves the accuracy and completeness of information needed, consistency in the registered PDD and the monitoring plan. The revision of monitoring plan is in accordance with the approved monitoring methodology applicable to the project activity, AM0024 Version 01 dated 30/09/2005 and ACM0002 version 06 dated 19/05/2006.

5. Document References

Category 1 Documents (documents provided by the Client that relate directly to the GHG components of the project, (i.e. the CDM Project Design Document, confirmation by the host Party on contribution to sustainable development and written approval of voluntary participation from the designated national authority):

/1/ Revised Monitoring Plan dated 23/04/2009

Category 2 Documents (background documents used to check project assumptions and confirm the validity of information given in the Category 1 documents and in validation interviews):

/2/ Registered PDD version 03 dated 11/03/2009
/3/ Validation Report issued by DNV, revision 02 dated 23/02/2009
/4/ AM0024 version 01 dated 30/09/2005
/5/ ACM0002 version06 dated 19/05/2006
/6/ GB/T 213-2003 Determination of calorific value of coal
/7/ GB/T 212-2001 Proximate analysis of coal
/8/ Validation and Verification Manual, version 01, dated 28/11/2008

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