VALIDATION OPINION FOR REVISION OF REGISTERED MONITORING PLAN

Philips Carbon Black Limited

Process Waste Heat utilization for power generation at Phillips Carbon Black Limited, Gujarat

UNFCCC Ref. No. 0309

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Project Title:			
Process Waste Heat utilization for power generation at Phillips Carbon Black Limited, Gujarat			
Organisation:		**Client:**	
SGS United Kingdom Limited		Philips Carbon Black Limited	
Subject:			
Validation Opinion for revision of Registered Monitoring Plan			
Validation Team:			
Nikunj Agarwal – Lead Assessor			☒ No Distribution (without permission from the Client or responsible organisational unit)
Technical Review:	**Trainee Technical Reviewer:**		
Date: 03-11-2008 Name: Sanjeev Kumar	NA		☐ Limited Distribution
Authorised Signatory:			
Name: Siddharth Yadav Date: 3rd November 2008			☐ Unrestricted Distribution
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1. Validation Opinion

Paragraph 57 of the modalities and procedures for the CDM allow 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 Philips Carbon Black Limited 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: Process Waste Heat utilization for power generation at Phillips Carbon Black Limited, Gujarat; UNFCCC ref. no. 0309. 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 approved monitoring methodology applicable to the project activity.

By applying the proposed revision of monitoring plan, the auxiliary fuel consumption is not directly measured in tonnes as mentioned in monitoring plan of the methodology but same was converted from volume basis to weight basis by the multiplication of specific gravity which is being measured by the third party.

Auxiliary fuel consumption will be measured in litres or m^3 as per the monitoring methodology while earlier in the registered PDD it was mentioned to be measured in litres only.

Monitoring of Specific gravity is now included in the revised monitoring plan,

NCV of the auxiliary fuel should be measured as per the monitoring methodology ACM0004 version 1 but the same was not included in the registered monitoring plan of the PDD, hence the monitoring of this parameter is included now in the revised monitoring plan.

Carbon Emission factor of auxiliary fuel should be included in the monitoring plan of the PDD as per the monitoring methodology ACM0004 version 1, hence the monitoring of the same parameter is now incorporated in the revised monitoring plan.

Oxidation factor of auxiliary fuel should be included in the monitoring plan of the PDD as per the monitoring methodology ACM0004 version 1, hence the monitoring of the same parameter is now incorporated in the revised monitoring plan.

As per the revised monitoring plan Total Electricity Generated and Auxiliary Consumption of Electricity will be measured continuously by the energy meter and will be displayed in the DCS and will be recorded in the log book shift wise, while earlier in the registered monitoring plan there was confusion for the same as to be measured by energy meter as well as DCS, but it is not possible to measure the electricity generation and consumption by the DCS.

Net Electricity consumed in house by PCBL would be calculated as a difference of the “Total Electricity Generated” and the sum of the “Auxiliary consumption of Electricity” and “Net Electricity exported to Gujarat Electricity Board (GEB) grid”.

Calibration of the energy meter used for electricity exported to the GEB grid would be calibrated once in two years as this is the property of the GEB, while the registered PDD and monitoring methodology says this meter for regular calibration.

Electricity Quantity generation from each source/plant (table D.2.1.3 parameter 10) should be measured Yearly as per the registered PDD, while this parameter is used for the baseline calculation and all other parameters related to the baseline calculation was fixed *ex-ante*, hence the monitoring of this parameter is also proposed as once during baseline estimation in the revised Monitoring plan.

The other monitoring parameters in the original monitoring plan remain unchanged. This revision improves the accuracy of information.

Theoretically, there should be no impact on the calculation of the emissions reduction achieved by this project activity

This revision improves the accuracy of information provided and consistency in 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) there is no finding from the previous verification reports.

Signed on Behalf of the Validation Body by Authorized Signatory

Signature: 

Name: Siddharth Yadav

Date: 3rd November 2008

2. Introduction

2.1 Objective

Paragraph 57 of the modalities and procedures for the CDM allow 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 Philips Carbon Black Limited 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: Process Waste Heat utilization for power generation at Phillips Carbon Black Limited, Gujarat.; UNFCCC ref. no. 0309. 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 host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

SGS reviewed of 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's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, 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. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

2.3 GHG Project Description

As per http://cdm.unfccc.int/Projects/DB/DNV-CUK1142432021.53/view web page there is no change in the project activity description. The project was registered on 29th May 2006 with reference number 0309.

2.4 The Names and Roles of the Validation Team Members

Name	Role	Affiliate
Nikunj Agarwal	Lead Assessor	SGS India

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 Use of the Validation Protocol

The validation protocol used for the assessment is partly based on the templates of the IETA / World Bank Validation and Verification Manual and partly on the experience of SGS with the validation of CDM projects. It serves the following purposes:

- it organises, details and clarifies the requirements the project is expected to meet; and
- it documents both how a particular requirement has been validated and the result of the validation.

The validation protocol consists of several tables. The different columns in these tables are described below.

Checklist Question	Ref ID	Means of Verification (MoV)	Comment	Draft and/or Final Conclusion
The various requirements are linked to checklist questions the project should meet.	Lists any references and sources used in the validation process. Full details are provided in the table at the bottom of the checklist.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (Y), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). New Information Request (NIR) is used when the validation team has identified a need for further clarification.

3.3 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 **New Information Request (NIR)** 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. mistakes have been made with a direct influence on project results;
II. validation protocol requirements have not been met; or
III. there is a risk that the project would not be accepted as a CDM project or that emission reductions will not be verified.

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

Observations may be raised which are for the benefit of future projects and future verification or validation actors. These have no impact upon the completion of the validation or verification activity.

Corrective Action Requests and New Information Requests are raised in the draft validation protocol and detailed in a separate form. In this form, the Project Developer is given the opportunity to "close" outstanding CARs and respond to NIRs and Observations.

3.4 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 Participation Requirements

As per the Validation Report (Report No. 2006-0257 dated 01/03/2006 revision 01) available on UNFCCC webpage http://cdm.unfccc.int/Projects/DB/DNV-CUK1142432021.53/view No Change.

4.2 Project Design

As per the Validation Report (Report No. 2006-0257 dated 01/03/2006 revision 01) available on UNFCCC webpage http://cdm.unfccc.int/Projects/DB/DNV-CUK1142432021.53/view No Change.

4.3 Eligibility as a Small Scale Project

Not applicable as this is a Large Scale Project activity.

4.4 Baseline Selection and Additionality

As per the Validation Report (Report No. 2006-0257 dated 01/03/2006 revision 01) available on UNFCCC webpage http://cdm.unfccc.int/Projects/DB/DNV-CUK1142432021.53/view No Change.

4.5 Application of Baseline Methodology and Calculation of Emission Factors

As per the Validation Report (Report No. 2006-0257 dated 01/03/2006 revision 01) available on UNFCCC webpage http://cdm.unfccc.int/Projects/DB/DNV-CUK1142432021.53/view No Change.

4.6 Application of Monitoring Methodology and Monitoring Plan

The project activity registered with CDM – EB uses ACM0004, version 1 as monitoring methodology. The registered monitoring plan of the project activity is required to be revised;

By applying the proposed revision of monitoring plan, the auxiliary fuel (CBFS and LDO) consumption of is not directly measured in tonnes as mentioned in monitoring plan of the methodology but same was converted from volume basis to weight basis by the multiplication of specific gravity which is being measured by the third party.

Auxiliary fuel consumption will be measured in litres or m^3 as per the monitoring methodology while earlier in the registered PDD it was mentioned to be measured in litres only.

Monitoring of Specific gravity is now included in the revised monitoring plan,

NCV of the auxiliary fuel should be measured as per the monitoring methodology ACM0004 version 1 but the same was not included in the registered monitoring plan of the PDD, hence the monitoring of this parameter is included now in the revised monitoring plan.

Carbon Emission factor of auxiliary fuel should be included in the monitoring plan of the PDD as per the monitoring methodology ACM0004 version 1, hence the monitoring of the same parameter is now incorporated in the revised monitoring plan.

Oxidation factor of auxiliary fuel should be included in the monitoring plan of the PDD as per the monitoring methodology ACM0004 version 1, hence the monitoring of the same parameter is now incorporated in the revised monitoring plan.

As per the revised monitoring plan Total Electricity Generated and Auxiliary Consumption of Electricity will be measured continuously by the energy meter and will be displayed in the DCS and will recorded in the log book shift wise, while earlier in the registered monitoring plan there was confusion for to be measured by energy meter as well as DCS, but it is not possible to measure the electricity generation and consumption by the DCS.

Net Electricity consumed in house by PCBL would be calculated as a difference of the "Total Electricity Generated" and the sum of the "Auxiliary consumption of Electricity" and "Net Electricity exported to GEB grid".

Calibration of the energy meter used for electricity exported to the GEB grid would be calibrated once in two years as this is the property of the GEB, while the registered PDD and monitoring methodology says this meter for regular calibration.

Electricity Quantity should be measured Yearly as per the registered PDD, while this parameter is used for the baseline calculation and all other parameters related to the baseline calculation was fixed, hence monitoring of this parameter is also proposed as once during baseline estimation in the revised Monitoring plan.

The revised monitoring plan was checked during the site visit and same was found inline with the monitoring practice adopted by the project proponent.

The 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-CUK1142432021.53/view and a revised monitoring plan is attached with the revised validation opinion.

There is no other change in the validation report (Report No. 2006-0257, dated 01/03/2006 revision 01) available on UNFCCC website from the following link:

http://cdm.unfccc.int/UserManagement/FileStorage/Z4X6DG3HAGCD7YENNMP6YUET7JABXN

4.7 Choice of the Crediting Period

As per the Validation Report (Report No. 2006-0257 dated 01/03/2006 revision 01) available on UNFCCC webpage http://cdm.unfccc.int/Projects/DB/DNV-CUK1142432021.53/view No Change.

4.8 Environmental Impacts

As per the Validation Report (Report No. 2006-0257 dated 01/03/2006 revision 01) available on UNFCCC webpage http://cdm.unfccc.int/Projects/DB/DNV-CUK1142432021.53/view No Change.

4.9 Local Stakeholder Comments

As per the Validation Report (Report No. 2006-0257 dated 01/03/2006 revision 01) available on UNFCCC webpage http://cdm.unfccc.int/Projects/DB/DNV-CUK1142432021.53/view No Change.

5. List of Persons Interviewed

Date	Name	Position	Short Description of Subject Discussed
19/05/2008	Mr. S.K. Choudhary	Manager (CPP)	Monitoring practice adopted at plant site
19/05/2008	Mr. P.P. Gandhi	Asst. Manager (CPP)	Monitoring practice adopted at plant site
19/05/2008	Mr. Sombit Kumar	Dy. Manager (CPP)	Monitoring practice adopted at plant site and requirement under registered PDD monitoring plan
19/05/2008	Mr. Shuvendu Bose	Manager (E & Y)	Monitoring practice adopted at plant site and requirement under registered PDD monitoring plan
19/05/2008	Mr. K. Kartick	Associate Consultant (E & Y)	Monitoring practice adopted at plant site and requirement under registered PDD monitoring plan

6. 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, date 23rd October 2008

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 02 dated 14th January 2006
/3/ Validation Report (No. 2006-0257 dated 01/03/2006 revision 01)
/4/ ACM0004 Version 1

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