

# VALIDATION OPINION FOR REVISION OF REGISTERED MONITORING PLAN

**Nesher Cements Enterprises Ltd.** 

# Energy efficiency project in the Ramla Cement Plant in Israel through instalment of new grinding technology

SGS Climate Change Programme

SGS United Kingdom Ltd SGS House 217-221 London Road Camberley Surrey GU15 3EY United Kingdom

SGS United Kingdom Ltd | SGS House, 217-221 London Road, Camberley, Surrey GU15 3EY Tel +44 (0)1276 697810 Fax +44 (0)1276 697888 Registered in England No. 1193985 Rossmore Business Park, Ellesmere Port, Cheshire CH65 3EN www.sgs.com



Date of Issue:				Project Number:		
01-07-2008			CDM.VER0585			
Project Title:						
Energy efficiency proj	ect in the Ram	ıla Cei	ment Plant in	Israel through ins	talment	t of new grinding technology
				Client:		
SGS United Kingdom Limited				Nesher Cements Enterprises Ltd.		
Subject:						
Validation opinion for	revision of Re	gistere	ed monitoring	Plan		
Validation Team:						
Kamesh Iyer – Lead Assessor				$\square$	No Distribution (without	
Avi Sadikov – Local Assessor				permission from the Client or		
Nikunj Agarwal – Expert				responsible organisational unit)		
Technical Review:		Trainee Technical Reviewer:				
Date: 09-07-2008		Name: N/A				
Name: Vikrant Badve					Limited Distribution	
Authorised Signator						
Name: Siddharth Yadav						
Date: 21 <sup>st</sup> July 2008				Unrestricted Distribution		
Revision Number:	Date:	Number of Pages:		Pages:		
0	09-07-2008		11			
1						
2						



# **Table of Content**

1.	Validation Opinion	4
2. 2.1 2.2		5
2.3 2.4	GHG Project Description	5
3. 3.1	Methodology Review of CDM-PDD and Additional Documentation	6 6
3.2 3.3	Use of the Validation Protocol	6 6
3.4 4.	Internal Quality Control	
 4.1 4.2	Participation Requirements	8
4.3 4.4	Eligibility as a Small Scale Project	8
4.5 4.6	· · · · · · · · · · · · · · · · · · ·	
4.7 4.8	Choice of the Crediting Period Environmental Impacts	9 9
4.9 6.	Local Stakeholder Comments	
	Document References	



#### Validation Opinion 1.

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 Nesher Cements Enterprises Ltd. to perform such a validation of the revision of Monitoring Plan according to the procedure detailed in Annex 34 to EB26 meeting report, the original monitoring plan is part of the Revised monitoring Plan approved for the registered CDM project: Energy efficiency project in the Ramla Cement Plant in Israel through instalment of new grinding technology in Israel (UNFCC reference number 0701). The purpose of a validation is to have an independent third party assessment of the revision of the monitoring plan, and the conformity with approved monitoring methodology applicable to the project activity.

By applying the proposed revision of the Monitoring Plan, the following ambiguity in the data type of some of the parameters and also the descriptions of one of the parameter that are monitored as part of the registered monitoring plan are elaborated to achieve more transparency. The other monitoring parameters in the original monitoring plan remain unchanged. This revision improves the accuracy of information.

The baseline electricity demand is a calculated parameter which will be calculated at beginning of each crediting period i.e. fixed for the entire crediting period and the data units are in MWh/ton. This parameter is determined on the basis of three years of historic data for the ball mill which was in operation before the project activity and has no impact on emission reductions calculations. The total baseline electricity is a calculated parameter which will be fixed for the entire crediting period and the data units are in MWh/ton.

The project electricity demand will now be calculated and the data units are in MWh/ton. This change has no effect on emission reduction calculations as this parameter is a derivative of two measured parameters i.e. The total project electricity demand and the quantity of cement produced. The total project electricity demand will now be measured as in practice. The project fuel consumption will be measured in litres/year. Further to convert the project fuel consumption into energy equivalent two new parameters i.e. Fuel Density and Energy Content have been added to achieve total transparency.

Theoretically there would be no impact on the calculation of the emission reduction achieved by this project activity and this revision is aimed to address the ambiguity in the data type and in the description of the parameters.

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) This is the first verification for the said project activity.

Signed on Behalf of the Validation Body by Authorized Signatory

- vay by

Signature:

Name: Siddharth Yadav Date: 21<sup>st</sup> July 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 Nesher Cements Enterprises Ltd. to perform such a validation of the revision of Monitoring Plan according to the procedure detailed in Annex 34 to EB26 meeting report, the original monitoring plan is part of the PDD of registered CDM project: Energy efficiency project in the Ramla Cement Plant in Israel through instalment of new grinding technology in Israel (UNFCC reference number 0701). The purpose of a validation is to have an independent third party assessment of the revision of the monitoring plan, and the conformity with 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'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 <u>http://cdm.unfccc.int/Projects/DB/DNV-CUK1160716504.46/view</u> web page validation report dated 07-10-2006. The project was registered on 7th January 2007.

#### 2.4 The Names and Roles of the Validation Team Members

Name	Role	Affiliate	
Kamesh Iyer	Lead Assessor	SGS India	
Avi Sadikov	Local Assessor	SGS Israel	
Nikunj Agarwal	Expert	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 <u>http://cdm.unfccc.int/UserManagement/FileStorage/3U1N10VFE1D3GNOT3WGF8V2E8JPSMB</u> DNV Validation Report No. 2006-0712 revision 2 dated 07-10-2006 available on UNFCCC website <u>http://cdm.unfccc.int/Projects/DB/DNV-CUK1160716504.46/view</u>. No change

# 4.2 Project Design

As per <u>http://cdm.unfccc.int/UserManagement/FileStorage/3U1N10VFE1D3GNOT3WGF8V2E8JPSMB</u> DNV Validation Report No. 2006-0712 revision 2 dated 07-10-2006 available on UNFCCC website http://cdm.unfccc.int/Projects/DB/DNV-CUK1160716504.46/view. No change

# 4.3 Eligibility as a Small Scale Project

As per <u>http://cdm.unfccc.int/UserManagement/FileStorage/3U1N10VFE1D3GNOT3WGF8V2E8JPSMB</u> DNV Validation Report No. 2006-0712 revision 2 dated 07-10-2006 available on UNFCCC website <u>http://cdm.unfccc.int/Projects/DB/DNV-CUK1160716504.46/view</u>. No change

# 4.4 Baseline Selection and Additionality

As per <u>http://cdm.unfccc.int/UserManagement/FileStorage/3U1N10VFE1D3GNOT3WGF8V2E8JPSMB</u> DNV Validation Report No. 2006-0712 revision 2 dated 07-10-2006 available on UNFCCC website <u>http://cdm.unfccc.int/Projects/DB/DNV-CUK1160716504.46/view</u>. No change

# 4.5 Application of Baseline Methodology and Calculation of Emission Factors

As per <u>http://cdm.unfccc.int/UserManagement/FileStorage/3U1N10VFE1D3GNOT3WGF8V2E8JPSMB</u> DNV Validation Report No. 2006-0712 revision 2 dated 07-10-2006 available on UNFCCC website <u>http://cdm.unfccc.int/Projects/DB/DNV-CUK1160716504.46/view</u>. No change

# 4.6 Application of Monitoring Methodology and Monitoring Plan

The project activity uses AMS II D Version 7 dated 28<sup>th</sup> November 2005 and AMS I D version 9 dated 28<sup>th</sup> July 2006

The need for revision of the monitoring plan is due to the following typological errors and has been validated as below

The baseline electricity demand is a parameter which had been calculated based on three years data before the validation process and therefore, all baseline parameters, were established during Validation. During the three years before the project activity, to which this parameter implies, this parameter was recorded periodically in the cement plant. Hence, this parameter is corrected as calculated and the recording frequency has been set to the start of the crediting period. The baseline is the installation of a new ball mill for which the values were calculated based on actual plant data with a 5 % increase to achieve conservativeness and the emission reduction estimations have been carried out as per the values used in the PDD and validated spreadsheet. This parameter when fixed ex-ante does not change any ER as this is most conservative as it is based and validated for the installation of a new ball mill.

The total baseline electricity demand is a parameter which is measured by electricity meters for the ball mill in existence before the project activity. Hence parameter is corrected as measured and the recording frequency has been set to the start of the crediting period i.e. fixed for the entire crediting period.

The Project electricity demand is a parameter which is calculated based on the total project electricity demand and the quantity of cement (type i) produced. Both these parameters are measured quantities



through Energy meters and Load cells respectively. Hence this parameter has been corrected as a calculated parameter.

The Project electricity demand is a parameter which is measured based on the energy meter readings and hence this parameter is corrected as a measured parameter

The project fuel consumption which is measured with the help of flow meters and the data output is in litres/hr and the data is cumulated into litres/year. Hence the data unit has been corrected to litres/year from TJ/year.

Two more parameters have been added to bring more clarity into the monitoring plan i.e. the fuel density and the energy content.

The Fuel density has been obtained from the supplier's data which will be fixed for the entire crediting period and Energy content has been from obtained from IPCC data, from 2006 Manual (Vol. 2, pp. 1.18-1.19)

The two parameters have been added to convert the project fuel consumption in TJ/year from litres/year by the following calculation method

Project fuel consumption (TJ/Year) = Project fuel consumption (litres/year) x Fuel density (kg/m<sup>3</sup>) x Energy Content of fuel (TJ/ton) x 10<sup>-6</sup>

Rest of the monitoring plan remains the same as mentioned in the registered PDD available at UNFCCC website <u>http://cdm.unfccc.int/UserManagement/FileStorage/3U1N10VFE1D3GNOT3WGF8V2E8JPSMB</u> and revised monitoring plan is attached with the revised validation opinion.

There is no other change in the validation report available on UNFCCC website http://cdm.unfccc.int/UserManagement/FileStorage/3U1N10VFE1D3GNOT3WGF8V2E8JPSMB DNV Validation Report No. 2006-0712 revision 2 dated 07-10-2006 available on UNFCCC website http://cdm.unfccc.int/Projects/DB/DNV-CUK1160716504.46/view.

# 4.7 Choice of the Crediting Period

As per <u>http://cdm.unfccc.int/UserManagement/FileStorage/3U1N10VFE1D3GNOT3WGF8V2E8JPSMB</u> DNV Validation Report No. 2006-0712 revision 2 dated 07-10-2006 available on UNFCCC website <u>http://cdm.unfccc.int/Projects/DB/DNV-CUK1160716504.46/view</u>. No change

# 4.8 Environmental Impacts

As per <u>http://cdm.unfccc.int/UserManagement/FileStorage/3U1N10VFE1D3GNOT3WGF8V2E8JPSMB</u> DNV Validation Report No. 2006-0712 revision 2 dated 07-10-2006 available on UNFCCC website <u>http://cdm.unfccc.int/Projects/DB/DNV-CUK1160716504.46/view</u>. No change

#### 4.9 Local Stakeholder Comments

As per <u>http://cdm.unfccc.int/UserManagement/FileStorage/3U1N10VFE1D3GNOT3WGF8V2E8JPSMB</u> DNV Validation Report No. 2006-0712 revision 2 dated 07-10-2006 available on UNFCCC website <u>http://cdm.unfccc.int/Projects/DB/DNV-CUK1160716504.46/view</u>. No change



# 5. List of Persons Interviewed

Date	Name	Position	Short Description of Subject Discussed
28/04/08	Mr. Uzi Barany	Production Planning and Control Manager	Monitoring plan adopted at site and requirement under reg. PDD
28/04/08	Mr. Yossi Koren	Monitoring Equipment and Controls Manager	Monitoring equipments and data collection at site
28/04/08	Mr. Omer Tamir	Eco-traders	Monitoring Report and calculations



# 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 dated 09-07-2008
- /2/ Registered PDD Version 4 dated 01/10/2006
- /3/ Approved Methodology AMS II D Version 7
- /4/ <u>http://cdm.unfccc.int/UserManagement/FileStorage/3U1N10VFE1D3GNOT3WGF8V2E8JPSMB</u> DNV Validation Report No. 2006-0712 revision 2 dated 02/05/2006 available on UNFCCC website

- 000 -