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# VALIDATION REPORT

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## Rajashree Cement

### **GHG EMISSION REDUCTION BY ENERGY EFFICIENCY IMPROVEMENT OF CLINKER COOLER IN CEMENT MANUFACTURING AT RAJASHREE CEMENT AT DISTRICT GULBARGA, KARNATAKA INDIA**

**SGS Climate Change Programme**

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### Summary

SGS India Pvt. Ltd., an affiliate of SGS United Kingdom Ltd. has made a validation of the CDM project activity "GHG emission reduction by energy efficiency improvement of clinker cooler in cement manufacturing at Rajashree cement at District Gulbarga, Karnataka India" by Rajashree Cement (A unit of Grasim Industries Ltd.) at Malkhed village of Gulbarga district in the state of Karnataka, India, on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.

The scope of validation is the independent and objective review of the project design document, baseline study and monitoring plan and other relevant document of the project. The information in this document is reviewed against the criteria defined in the Marrakech Accords (Decision 17) and the Kyoto Protocol (Article 12) and subsequent guidance from the CDM Executive Board.

The overall validation process, from Contract Review to Validation Report & Opinion, was conducted using internal procedures (UK.PP.12 issue 2 dated 01/07/2005).

The first output of the validation process is a list of Corrective Actions Requests and New Information Requests (CAR and NIR), presented in Annex 3 of this document. The total 10 CAR and 4 NIR were raised on the present project activity. Taking into account this output, the project proponent revised its project design document.

In summary, it is SGS's opinion that the proposed CDM project activity correctly applies the baseline and monitoring methodology as mentioned in approved methodology adopted for the proposed project activity and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria.

Subject.:		
CDM validation		<b>Indexing terms</b>
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## Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEA	Central Electricity Authority
CER	Certified Emission Reductions
COP/MOP	Conference of parties serving as the meeting of parties to Kyoto Protocol
CO <sub>2</sub>	Carbon Dioxide
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EIA	Environment Impact Assessment
GHG	Green House Gas(es)
GWh	Giga watt hour
I	Interview
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
ISHC	International Stakeholder Consultation
KPCB	Karnataka Pollution Control Board
kWh	Kilo watt hour
MNES	Ministry of Non Conventional Energy Sources
MoEF	Ministry of Environment and Forest
MoV	Means of Verification
MP	Monitoring Plan
MT	Metric Tonne
NIR	New Information Request
PDD	Project Design Document
PLR	Prime Lending Rate
UNFCCC	United Nations Framework Convention for Climate Change

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## 1 Introduction

### 1.1 Objective

The Rajashree Cement (A unit of Grasim Industries Ltd.) has commissioned SGS to perform the validation of the project: "GHG emission reduction by energy efficiency improvement of clinker cooler in cement manufacturing at Rajashree cement at District Gulbarga, Karnataka India" with regard to the relevant requirements for CDM project activities. The purpose of a validation is to have an independent third party assess the project design. In particular, the project's baseline, the monitoring plan (MP) and the project's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria. Validation is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of Certified Emission Reduction (CER). UNFCCC criteria refer to the Kyoto Protocol criteria and the CDM rules and modalities and related decisions by the COP/MOP and the CDM Executive Board.

### 1.2 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.

### 1.3 GHG Project Description

The proposed CDM project activity is up-gradation of clinker cooler energy efficiency in cement manufacturing for cement lines I and III at Rajashree Cement; located at Adityanagar, village Malkhed of Gulbarga district of Karnataka state in India. The project activity was completed in two phases first phase comprises of Up-gradation of pre-heater section from (5th stage to 6th stage) as a part of phase one which was completed in year 2001-02 and second on of comprises Up-gradation of clinker cooler efficiency completed in year 2002-03. The project involves the redesigning and retrofitting of the grate system with Omega plate type system, which will increase the cooler recuperation efficiency i.e. utilise more heat in clinker cooler. The project technology for the present project activity was supplied by KHD Germany. The project activity was started on 18<sup>th</sup> January 2001 and the line I was commissioned on 12<sup>th</sup> April 2004 and line III was commissioned on 15<sup>th</sup> January 2005.

#### Baseline Scenario:

Under the baseline scenario, there would have been more direct on-site emissions through burning of fossil fuels as a fuel in the rotary kiln for meeting thermal energy requirements in manufacturing of cement.

#### With Project Scenario:

The project activity reduces specific thermal consumption for cement production and conserves it. The project activity is redesigning of grate system for better heat trapping in clinker cooler it reduces specific thermal energy consumption and contributes to conservation of coal, a non-renewable natural resource and also reduced GHG emissions.

#### Leakage:

As per the methodology AMS II-D; applicable for the project activity, leakage is to be considered if the energy generating equipment is transferred from another activity or if the existing equipment is

transferred to another activity. However during validation site visit it was checked that no part of the present project activity was transferred from another project activity and hence no leakage is considered for the present CDM project activity.

#### Environmental & Social Impacts:

There are no negative environmental and social impacts expected with the project activity, the same has been cross-checked during local stakeholder consultation process. The project is an energy efficiency improvement in cement manufacturing and saved thermal energy which otherwise would have been consumed in the clinker cooler and to generate the same, there would have been more GHG emission. Hence this project has positive environmental and social impacts.

#### **1.4 The names and roles of the validation team members**

<b>Name</b>	<b>Supplier</b>	<b>Role</b>
Mr. Shivananda Shetty	SGS India	Team Leader / Lead Auditor
Mr. Sanjeev Kumar	SGS India	Assessor
Mr. Vikrant Badve	SGS India	Local Assessor (Trainee)
Mr. Marco van der Linden	SGS Netherlands	Technical reviewer

## 2 Methodology

### 2.1 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. Additional information can be required to complete the validation, which may be obtained from public sources or through telephone and face-to-face interviews with key stakeholders (including the project developers and Government and NGO representatives in the host country). These may be undertaken by the local SGS affiliate. The results of this local assessment are summarized in Annex 1 to this report.

### 2.2 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.

<b>Checklist Question</b>	<b>Means of verification (MoV)</b>	<b>Comment</b>	<b>Draft and/or Final Conclusion</b>
<i>The various requirements are linked to checklist questions the project should meet.</i>	<i>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.</i>	<i>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.</i>	<i>This is either acceptable based on evidence provided (Y), or a <b>Corrective Action Request (CAR)</b> due to non-compliance with the checklist question (See below). <b>New Information Request (NIR)</b> is used when the validation team has identified a need for further clarification.</i>

The completed validation protocol for this project is attached as Annex 2 to this report

### 2.3 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 (Annex 3). In this form, the Project Developer is given the opportunity to "close" outstanding CARs and respond to NIRs and Observations.

## **2.4 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.



### 3 Determination Findings

#### 3.1 Participation requirements

The host Party for this project is India. India has ratified the Kyoto protocol on 26th Aug 2002. Initially project proponent did not submitted letter of acceptance from Indian DNA, hence CAR (01) was raised. In response to CAR (01) project proponent has submitted a copy of the Letter of Approval dated 11<sup>th</sup> September 2006 and issued by the India DNA (reference number 4/16/2006 -CCC). The copy was verified with the original during the validation site visit and found acceptable. The project activity name on the letter of approval and that mentioned in section A.1 of the PDD was cross checked and found correct. CAR (01) was closed.

No Annex I Party has been identified in the PDD and therefore no further Letter of Approval was available. It is observed that the CDM EB has agreed that the registration of a CDM project activity can take place without an Annex I Party being involved at the stage of registration although it should be noted that before CER can be transferred to an Annex I Party, a Letter of Approval will need to be submitted.

#### 3.2 Baseline selection and additionality

The project activity is reducing the use of energy in cement manufacturing. The project has applied baseline as mentioned in the small scale methodology AMS II-D version 07 dated 28th November 2005 for "Energy efficiency and fuel switching measures for Industrial facilities" as per Appendix B of the simplified modalities and procedures for small-scale CDM project activities.

The data source / parameters for baseline and project activity listed in table B 2(a) of PDD for calculating the cooler efficiency and energy savings were checked during the site visit. The local assessor checked the background information used for arriving at the value selected as benchmark for baseline emissions during the site visit. A copy of the same was also submitted to the validator and it is listed in section 7 of this report.

The project has adopted the Investment barrier for the present project activity to justify the additionality of the project. In addition to this project proponent has also mentioned few technological barriers faced during early operation period of the project activity. In order to get all the related documents on the basis of which the project was shown additional, CAR (11) was raised.

The funds for the project activity are made available from the own funds (internal accruals) of the company. The project proponent being a large group has their own standards for IRR i.e. 18% on any investment. This was supported by an internal communication letter which was submitted to the validator and also listed in section 7 of this document. The documentary evidence was verified during discussions with Manager (Production, Planning and Budgeting) and Plant Head. Project proponent has submitted excel spreadsheet giving calculations for IRR. After verifying the calculations and discussed the same with Plant head and Manager (Production, Planning and Budgeting) it was concluded that for unit 1 the IRR for the project activity without considering CDM benefit was 7.1% and for unit 3 it was 4.5%. Thus it was found in both the cases the IRR is less than the standard IRR value laid by the project proponent. IRR with considering the CDM benefits for the project activity in unit 1 was 15.6% and for unit 3 it was 11.0%; which are slightly less than the standard laid down by project proponent. It was also checked that the minimum required rate of return for the project proponent was lower than the prime lending rate (9.2%) of Bank when project was considered. The financial data, calculations and assumptions made in IRR calculation sheet were verified. The project proponent has submitted MoM which discusses the problems associated with the Omega plates installed in Unit 1 and

Unit3. The content of the document was verified during the discussion with the plant persons. The document was found acceptable.

Thus it can be concluded that the project activity with out CDM funds also is not a financially viable alternative and by putting the project with low IRR project proponent is bearing a financial risk and thus it is an additional activity. Thus CAR (11) was closed.

The Project proponent was not able to produce documentary evidence for the barriers due to prevailing practice mentioned in version 1 of the PDD; hence same were removed in the rephrased PDD.

The project proponent in version 01 of the PDD made a claim for retroactive credits for the present CDM project activity. Project proponent was asked to submit the documentary evidence for CDM consideration as per tool for the demonstration and assessment of additionality version 2 and NIR (07) was raised. In response to the NIR (07) project proponent made it clear that as per EB 23 meeting report para 90 (a) the present project is not eligible for the retroactive credit claim as the contract with present DOE has been signed after 31<sup>st</sup> December 2005 which was the last date for submitting the PDD if project wishes to claim for retroactive credit. The explanation given by the project proponent has been accepted. The project proponent has also accepted that the crediting period for the project activity will start from the date of registration of the project activity. The project proponent has also revised the emission reduction calculations and the same has been verified with the rephrased version of the PDD. NIR (07) was closed.

The project proponent has fixed ten years crediting period from the date of registration of the project activity with UNFCCC. The project activity start date was considered as 15<sup>th</sup> June 2001 on which the purchase order for the phase 1 of the project activity was released. A copy of purchase order relevant to the project activity was made available to the validator during site visit. The starting date of project activity was thus verified and accepted. Project proponent also provided minutes of meeting held on 18<sup>th</sup> Jan. 2001; in which project activity was considered for implementation and revenue from CDM funds was considered for the project activity. This was verified during the discussion with the project proponent.

It was also discussed why the project proponent was going for CDM registration after a gap of 2-3 years from commissioning of the entire project activity. Responding to the same project proponent made clear that though they have considered the revenue from CDM funds in early stage of the project they could not go for CDM registration when the project activity was commissioned in the year 2005; as the last date for submission of the PDD to claim retroactive credit i.e.31<sup>st</sup> December 2005 was over. Hence project proponent was not able to claim retroactive credits and now going for CDM registration in the year 2007.

### **3.3 Application of Baseline methodology and calculation of emission factors**

The proposed CDM project activity is bundled CDM project activity which has sub-bundled two projects. Both the projects are the retrofit in cooler for energy efficiency and uses baseline methodology as described under Type AMS II-D version 07 dated 28<sup>th</sup> November 2005 for “Energy efficiency and fuel switching measures for Industrial facilities” as per Appendix B of the simplified modalities and procedures for small-scale CDM project activities.

It was mentioned in the PDD version 01 that the savings from first sub-bundle of the present project activity is 43 GWh<sub>th</sub> i.e. 35768 MCal per year and from second sub-bundle it was 40 GWh<sub>th</sub> i.e. 33661 MCal which will contribute in reduction of GHG emissions. The two project activities are sub-bundled hence as per EB 21 Annex 21 (General Principles for bundling) the present bundled project activity gets qualified under small scale project category. Project proponent at the time of PDD submission does not provided calculation spreadsheet giving the emission reduction calculations for baseline activity and project activity hence NIR (08) was raised. Responding to NIR (08) project proponent

provided the calculations for emission reduction on account of energy savings. The baseline emission calculations and emission reductions were found to be in order during the desk review and during the local assessments at the site. It was checked by the local assessor considering the sub-bundling of the project activity as per EB 21 Annex 21 that the energy savings of the individual project do not exceed the equivalent of 15 GWh<sub>e</sub> per year which is equivalent to a maximum saving of 45 GWh<sub>th</sub> per year in fuel input. Also this was verified from the scope of supply and performance guarantee as mentioned in the purchase order that the savings from the project activity will not exceed the small scale limit set for the CDM project activities. The emission reduction figures would further be checked during verification. Thus NIR (08) was closed.

Project proponent has made this CDM project activity as a sub-bundled project activity as per Annex 21 of EB 21. The document was also referred to check the project proponent's claim of the small scale project activity. The project technology details from the technology supplier and purchase order for the same was made available to validator during site visit. The documents were used to verify the information given in section A.4.2 under sub-heading Technology to be employed by the project activity in the PDD. The project proponent's claim of project activity being a small scale project activity is also checked from the scope of supply in which the guaranteed energy saving per kg of clinker production was given by the technology supplier. This was found to be less than 45GWh<sub>th</sub>. A copy of relevant pages from scope of supply is also attached in section 7 of this document.

### 3.4 *Application of Monitoring methodology and Monitoring Plan*

The monitoring plan given in version 01 of the PDD was not clear and it was not as per AMS II-D version 07 dated 28<sup>th</sup> November 2005 methodology, as time period for which archived data will be available for reference was not mentioned in PDD. CAR (13) was raised for same. In response to CAR (13) project proponent made it clear that the data monitored will be available for reference upto 2 years after crediting period and same was included in the rephrased PDD. Thus CAR (13) was closed.

During review of version 1 of the PDD it was found that project proponent was not clear on monitoring practice. The several issues as mentioned in CAR (14) were not addressed in the version 01 of the PDD and thus creating confusion on which data to be monitored. The project proponent in his response to CAR (14) made it clear that GCV of the fuel will be used for calculation purpose and same has been included in the rephrased PDD. Project proponent has submitted relevant ISO certificates and calibration certificates for all equipments used to monitor the data. Initial procedures for monitoring and data measurement were found to be in place by the local assessor during site visit. CAR (14) was closed.

### 3.5 *Project design*

The PDD of the present project activity has been prepared in accordance with the version 02 of guidelines for completing CDM-SSC-PDD in Annex 27 of EB 23. Thus when PDD was cross checked against these guidelines it was found that the format used for CDM-SSC-PDD was correct one. During review of version 01 of the PDD it was found that the notification used for foot-notes in section E needs to be addressed to avoid confusion. CAR (05) was raised and project proponent was asked to correct the same. Project proponent has made necessary corrections in the rephrased PDD which are accepted and CAR (05) was closed.

It was found that section C.1.1 of version 01 of the PDD indicated 15<sup>th</sup> June 2001 as a project activity starting date; but no evidence has been provided to the validator regarding the starting date of the project activity. CAR (06) was raised asking project proponent to give evidence regarding the starting date of the project activity. In response to CAR (06) project proponent submitted a copy of relevant purchase orders among these the first purchase order was raised on 15<sup>th</sup> June 2001. The correction has been made in the rephrased PDD and is acceptable. CAR (06) was closed.

The present CDM project activity is a sub-bundled project activity. Project proponent has sub-bundled the projects as per Annex 21 of EB 21. This was checked by the validator and was found right. During document review it was found that project proponent did not submitted F-bundle form for the project activity. NIR (09) was raised asking project proponent to submit the F-bundle form for the project activity. Project proponent submitted F-bundle form which was checked against the format for the form and with the PDD. The F-bundle form found to be ok and accepted. NIR (09) was closed.

The project boundary given in version 01 of the PDD was not clear as it is not showing electrical energy input to cooler fans and also not indicating radiation losses from clinker cooler hence CAR (12) was raised asking project proponent to correct the project boundary. The project proponent made required corrections in the project boundary and same are included in the rephrased PDD. The correction made in project boundary is found acceptable as it now includes all the relevant equipments which were described as a part of project activity during site visit. Hence CAR (12) was closed.

### 3.6 Environmental Impacts

CAR (10) was raised to check the compliance with local environmental regulations in that EIA requirement for the project activity was checked and also project proponent was asked to submit consent to establish and operate from Karnataka Pollution Control Board (KPCB), a local authority responsible for giving Environmental clearance. The project proponent in his response to CAR (10) has submitted the respective consents from KPCB, and also given MoEF web link reference (<http://envfor.nic.in/legis/eia/so1533.pdf>), which indicates that present project activity category was not listed under the activities which do require EIA. The project proponent in table under section F.2 in the PDD mentions in details regarding the Environmental Impacts on various parameters like fuel resources, Air quality, Water, Land, Noise generation and ecology and benefits to these parameters due to project activity. The information provided under section F in rephrased PDD was found satisfactory and CAR (10) was closed.

### 3.7 Local stakeholder comments

The project activity involves up-gradation of existing clinker coolers to energy efficient one as this activity was a small scale activity and company staff related to the project activity was identified as a local stakeholder with local administrative body. The project proponent in version 1 of the PDD has not mentioned the company employees as local stakeholders identified for project activity. Hence CAR (02) was raised asking project proponent to provide correct list of local stakeholders which were related to the project activity. Project proponent in rephrased version of PDD provided list of local stakeholders related to the project activity which include company employees as one of the stakeholder and thus CAR (02) is closed.

In order to verify whether the project details were made publicly available and how the public comments on the project activity were invited; NIR (03) was raised. In response to NIR (03) the project proponent provided a copy of letters written to Sarpanch, Malkhed village and to employees of Rajashree Cement who were responsible for the operation and maintenance of the project activity; to the validator during site visit. This clarified the transparency in the LSC process and NIR (03) was closed.

The summary of local stakeholders' comments were not clear in version 1 of the PDD hence CAR (04) was raised. Project proponent made necessary corrections and included corrected the summary of comments in the rephrased PDD. A copy of letters from the identified local stakeholders regarding their comments on project activity is also provided to the validator and same has been verified for any adverse impact to local community. It was also found that no public complain was registered to KPCB's office on project activity as consent to operate has been provided to the plant and copy of same was



made available to validator. There was no adverse comment identified during international stakeholder consultation and local stakeholder consultation process during site visit thus CAR (04) was closed.

#### **4 Comments by Parties, Stakeholders and NGOs**

In accordance with sub-paragraphs 40 (b) and (c) of the CDM modalities and procedures, the project design document of a proposed CDM project activity shall be made publicly available and the DOE shall invite comments on the validation requirements from Parties, stakeholders and UNFCCC accredited non-governmental organizations and make them publicly available. This chapter describes this process for this project.

##### **4.1 Description of how and when the PDD was made publicly available**

The PDD and the monitoring plan for this project were made available on the SGS website <http://www.sgsqualitynetwork.com/tradeassurance/ccp/projects/project.php?id=136> and were open for comments from 30<sup>th</sup> August 2006 to 28<sup>th</sup> September 2006. Comments were invited through the UNFCCC CDM homepage.

##### **4.2 Compilation of all comments received**

The project was up loaded for International stakeholder consultation (ISHC) for a period of 30 days and received no comment. Also no adverse comment received during local stakeholder consultation.

##### **4.3 Explanation of how comments have been taken into account**

No adverse comment was received for the project activity.



## 5 Validation opinion

SGS has performed a validation of the project: “GHG emission reduction by energy efficiency improvement of clinker cooler in cement manufacturing at Rajashree cement at District Gulbarga, Karnataka India” at Adityanagar, village Malkhed of Gulbarga district of Karnataka state in India, by Rajashree Cement ( a unit of Grasim Industries Ltd.).. The Validation was performed on the basis of the UNFCCC criteria and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

Using a risk based approach, the review of the project design documentation and the subsequent follow-up interviews have provided SGS with sufficient evidence to determine the fulfilment of the stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria. The project will hence be recommended by SGS for registration with the UNFCCC.

SGS has received confirmation by the host Party that the project activity assists it in achieving sustainable development.

By using energy efficient technology for distribution of clinker cooler on the grate system and thus improving effective trapping of heat in the clinker cooler, the project results in reductions of greenhouse gas emissions that are real, measurable and give long-term benefits to the mitigation of climate change. A review of the investment analysis, operational problems associated with project activity in early stages of operation and prevailing practice, demonstrates that the proposed project activity was not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. The project is already implemented and is likely to achieve the estimated amount of emission reductions.

The validation is based on the information made available to SGS and the engagement conditions detailed in the report. The validation has been performed using a risk based approach as described above. The only purpose of this report is its use during the registration process as part of the CDM project cycle. Hence SGS can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

## 6 List of persons interviewed

<b>Date</b>	<b>Name</b>	<b>Position</b>	<b>Short description of subject discussed</b>
17/10/2006	Mr. L.N. Rawat	Plant Head	Project activity description, project activity finance, starting date and commissioning date of the project activity
17/10/2006	Mr. M.V. Ramana Rao	Asst. Vice President (Technical)	Project activity description
17/10/2006	Mr. P.H. Chowdhary	Deputy General Manager (Production)	Project activity description, baseline of the project activity, starting date and commissioning date of the project activity
17/10/2006	Mr. Umesh Srivastava	Manager (Production, Planning and budgeting)	Project activity description, Project finance
17/10/2006	Mr. Durairaja	Deputy Manager (Instrumentation)	Project activity description, baseline of the project activity
17/10/2006	Mr. R. Krishnaiah	Manager (Production)	Local stakeholder consultation
17/10/2006	Mr. Ramurti	Process Engineer	Local stakeholder consultation
17/10/2006	Mr. P. G. Kulkarni	Kiln fitter	Local stakeholder consultation
17/10/2006	Mr. Kalyannappa	Ex-Sarpanch	Local stakeholder consultation



## 7 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/ Letter of Acceptance
- /2/ Modalities of communication
- /3/ PDD Version 1 dated 22<sup>nd</sup> December 2005
- /4/ PDD Version 2 dated 4<sup>th</sup> December 2006
- /5/ PDD Version 3 dated 28<sup>th</sup> December 2006
- /6/ F Bundle Form for CDM SSC version 01 dated 4<sup>th</sup> December 2006
- /7/ F Bundle Form for CDM SSC version 02 dated 28<sup>th</sup> December 2006
- /8/ Excel spreadsheet for IRR calculations
- /9/ Excel spreadsheets for Baseline and Project emission calculations for unit 1 and unit 3

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):

- /1/ Purchase order for project technology
- /2/ MoM for Project activity Commissioning
- /3/ Minutes of Meeting for project activity discussion
- /4/ Letter from CA
- /5/ Calibration certificates
- /6/ Letters to identified local stakeholders
  - Letter to Sarpanch, Malkhed
  - Letter to villagers Malkhed
  - Letter to Rajashree Cement employees
- /7/ Letters from identified local stakeholders
  - Letter from Sarpanch, Malkhed
  - Letter from Mr. B.K. Patil (villager)
  - Letter from P.G. Kulkarni Rajashree Cement employee
  - Consent to establish and Consent to operate from KPCB
- /8/ Letter from Technology supplier
- /9/ ISO certificates
- /10/ Shutdown records
- /11/ Copy of monitoring plan
- /12/ Internal Communication letter
- /13/ Bank Prime lending rate
- /14/ Heat Capacity Calculation formula

## Annex 1: Local Assessment

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
12.1 To get copy Host Country Approval (HCA) letter from Project Proponent.	PDD F.1	DR	The letter (reference number 4/16/2006-CCC) has been obtained and verified with the original. The same was listed under heading Document references in Category 1 as /1/ and also submitted with validation report UK.AR.6.CDM.Val0765	Y	Y
12.2 No ODA has been used for this project and to be confirmed during site visit.	PDD Annex 2	DR/I	Project proponent has submitted letter from Company CA regarding funds availability for the project. The document was listed under heading Document references in Category 2 as /4/.	Y	Y
12.3 Invitation for LSC meeting was sent to participate and communicate suggestions regarding the project activity. Documents are required to verify the same.	PDD G.1	DR/I	Letter written to Sarpanch of Malkhed village, villagers of Malkhed and company employee seeking comments on the project activity have been obtained to verify the transparency in consultation process. The document was verified during local stakeholder consultation and listed under heading Document references in Category 2 as /6/.	Y	Y
12.4 The regulatory approval (consent to establish and operate the project) from the Pollution Control Board is required to to verify that local/legal requirements have been met.	PDD G.1,G.2 and G.3	DR	The consent to operate and establish from KPCB have been obtained, verified for the validity period and listed under heading Document references in Category 2 as /7/.	Y	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
12.5 Local stakeholders' comments are required to be verified for any adverse comment.  Due account of stakeholder comments received required to be verified..	PDD G.1,G.2 and G.3	DR/I	There were no adverse comments found in the letters from identified local stakeholder. This was verified during local stakeholder consultation process. The same was listed under heading Document references in Category 2 as /7/.	Y	Y
12.6 Project design engineering documents from the technology supplier are required to be checked. Copy of offer made/ specifications given by technology supplier.	PDD A.4	DR	Purchase specifications for Project activity were obtained and verified for the project capacity. The document was listed under heading Document references in Category 2 as /1/.	Y	Y
12.7 EIA report for the project activity.	PDD F.1	Web site	EIA requirement for the present project activity was checked with MoEF notification available on web-site <a href="http://envfor.nic.in/legis/eia/so1533.pdf">http://envfor.nic.in/legis/eia/so1533.pdf</a> .  This was found acceptable.	Y	Y
12.8 The monitoring plan required to be checked.	PDD D.3	DR/ SV	The monitoring plan for the project activity was checked during site visit and found satisfactory. The project proponent is using Data Control System (DCS) for the data monitoring. A screen printout of the DCS monitoring system was listed under heading Document references in Category 2 as /11/.	Y	Y
12.9 All the calibration certificates are required to be checked.	PDD D.3	DR	The certificates were obtained, verified and listed under heading Document references in Category 2 as /5/.	Y	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
<p>12.10 MoM of board meeting in which CDM was considered for the project activity.</p> <p>The commissioning certificate of the project activity.</p>	PDD C.1.1	DR	<p>Project proponent has submitted the MoM of board meeting which took held on 18th Jan 2001 in which CDM was considered for project activity. A copy of same has been given to the validator and same was cross-checked during discussion with plant head. The document was listed under heading Document references in Category 2 as /3/</p> <p>Also the Project activity PG test letter was obtained from records. The commissioning date of project activity was verified during discussion with plant operator. The documents were listed under heading Document references in Category 2 as /2/.</p>	Y	Y
12.11 Quality Assurance (QA) and Quality Control (QC) procedures for data monitoring.	PDD D.4	DR/ SV	The ISO certificates for Rajashree Cement were obtained and listed under heading Document references in Category 2 as /9/.	Y	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
12.12 Financial analysis for the project activity.	PDD B.3	DR	The financial analysis spreadsheet for both the project activities were submitted by project proponent and verified for IRR calculations. The document is attached in 'Project Doc' folder.  Also documentary evidence giving minimum IRR for any investment was submitted by project proponent, same is obtained and verified during discussions with Manager (Production planning & Budgeting) The document was listed under heading Document references in Category 2 as /12/.	Y	Y
12.13 Calculation spreadsheet for baseline and project emission reductions during project crediting period.	PDD E.2	DR	The excel spreadsheet for emission reduction calculation was obtained and verified the calculations and assumptions made the relevant information found satisfactory. The document was attached in 'Project doc' folder.	Y	Y
12.14 Documentary evidence that the employees of the company undergone training programme related to project activity.	PDD D.5	DR	The training was provided by the technology supplier to the plant employees as per the terms and conditions mentioned in PO. The document was obtained; verified during site visit.	Y	Y
12.15 Modalities of communication			The document was submitted and same was listed under heading Document references in Category 1 as /2/ and also submitted with validation report UK.AR6.CDM.Val0757	Y	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
12.16 Why the present project activity was considering CDM funds in the year 2006 and why not from the date of commissioning of the project activity		I	The project proponent during discussion made it clear that the project activity was considered for CDM during early discussion (refer MoM of Project consideration). The project proponent was not able to apply for CDM registration when the project activity was commissioned in the year 2005; as the last date for submission of the PDD to claim retroactive credit i.e. 31 <sup>st</sup> December 2005 was over. Hence project proponent was not able to claim retroactive credits and now going for CDM registration in the year 2007.	Y	Y

## Annex 2: Validation Protocol

**Table 1 Participation Requirements for Clean Development Mechanism (CDM) Project Activities (Ref PDD, LETTERS OF APPROVAL AND UNFCCC WEBSITE) ALL CDM PROJECT ACTIVITIES**

REQUIREMENT	Ref	MoV	Comment	Draft finding	Final Concl
1.1 The project shall assist Parties included in Annex I in achieving compliance with part of their emission reduction commitment under Art. 3 and be entered into voluntarily.	PDD	DR	Project will assist Parties included in Annex I in achieving compliance with part of their emission reduction commitment under Art. 3. However, no Annex-1 participant has been identified so far.	Y	Y
1.2 The project shall assist non-Annex I Parties in achieving sustainable development and shall have obtained confirmation by the host country thereof, and be entered into voluntarily.	PDD	DR	The project activity is likely to contribute to sustainable development.  Letter of approval from Host Country (India) Designated National Authority (DNA) is required to be submitted by project proponent.	CAR1	Y CAR1 closed
1.3 All Parties (listed in Section A3 of the PDD) have ratified the Kyoto protocol and are allowed to participate in CDM projects.	PDD/ UNF CCC Web-site	DR/ UNF CCC Web-site	Project is unilateral and India has ratified the protocol on 26 <sup>th</sup> August 2002 and is allowed to participate. The web link is <a href="http://unfccc.int/parties_and_observers/parties/items/2109.php">http://unfccc.int/parties_and_observers/parties/items/2109.php</a>	Y	Y



REQUIREMENT	Ref	MoV	Comment	Draft finding	Final Concl
1.4 The project results in reductions of GHG emissions or increases in sequestration when compared to the baseline; and the project can be reasonably shown to be different from the baseline scenario.	PDD	DR	The project activity is performed in two stages in line 1 and line 3 and will improve the energy efficiency in clinker cooler by effective trapping of the heat in clinker cooler and will reduce same amount of heat generated by fossil fuel firing and hence result in reduction of GHG emissions.	Y	Y
1.5 Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for minimum 30 days (45 days for AR projects), and the project design document and comments have been made publicly available	PDD	DR/ UNF CCC Web -site	Yes, the project is listed on UNFCCC website from 30 <sup>th</sup> August 2006 to 28 <sup>th</sup> September 2006. <a href="http://cdm.unfccc.int/Projects/Validation/DB/C9NK_S8NG61EKRY030MCYINH6JHOJG3/view.html">http://cdm.unfccc.int/Projects/Validation/DB/C9NK_S8NG61EKRY030MCYINH6JHOJG3/view.html</a> The project was also listed on SGS climate change website from 30 <sup>th</sup> August 2006 to 28 <sup>th</sup> September 2006. <a href="http://www.sgsqualitynetwork.com/tradeassurance/ccp/projects/project.php?id=136">http://www.sgsqualitynetwork.com/tradeassurance/ccp/projects/project.php?id=136</a> Number of comments received - 0	Y	Y
1.6 The project has correctly completed a Project Design Document, using the current version and exactly following the guidance	PDD	DR	Project has used current version (version 2) of PDD applicable and followed the guidelines, except pending closure of some CARs/ NIRs.	Pending CARs/ NIRs	Y
1.7 The project shall not make use of Official Development Assistance (ODA), nor result in the diversion of such ODA.	PDD	DR	No ODA has identified in PDD. Evidence needs to be checked during site visit.	Site visit	Y

REQUIREMENT	Ref	MoV	Comment	Draft finding	Final Concl
1.8 For AR projects, the host country shall have issued a communication providing a single definition of minimum tree cover, minimum land area value and minimum tree height. Has such a letter been issued and are the definitions consistently applied throughout the PDD?	PDD	DR	Not relevant as the project is not an AR project.	Not Applicable	Not Applicable
1.9 Does the project meet the additional requirements detailed in: Table 9 for SSC projects Table 10 for AR projects Table 11 for AR SSC projects	PDD	DR	This is an SSC project which comes under category AMS II-D and hence table 9 is applicable.	Y	Y
1.10 Is the current version of the PDD complete and does it clearly reflect all the information presented during the validation assessment?	PDD	DR	The version of PDD used by project proponent gives all the information, except pending closure of some CARs/ NIRs.	Pending CARs/ NIRs	Y
1.11 Does the PDD use accurate and reliable information that can be verified in an objective manner?	PDD	DR	The PDD uses reliable information and that can be verified in an objective manner.	Pending site visit clarification	Y

**Table 2 Baseline methodology/ies (Ref: PDD Section B and E and Annex 3 and AM) Normal CDM projects only**

**Table 3 Additionality (Ref: PDD Section B3 and AM) Normal CDM projects only**

**Table 4 Monitoring methodology (PDD Section D and AM) Normal CDM Projects only**

**Table 5 Monitoring plan (PDD Annex 4) Normal CDM Project activities only**

**Table 6 Environmental Impacts (Ref PDD Section F and relevant local legislation) Normal CDM Project Activities only**

**Table 7 Comments by local stakeholders (Ref PDD Section G) All CDM Project Activities**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
7.1 Have relevant stakeholders been consulted?	PDD	DR	The list of the relevant stakeholders consulted is not clear in PDD.	CAR2	Y CAR2 closed
7.2 Have appropriate media been used to invite comments by local stakeholders?	PDD	DR	How the identified local stakeholders are informed about the project activity, is not mentioned in PDD. Proper documentary evidence to be provided.	NIR3	Y NIR3 closed
7.3 If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	PDD	DR	Stakeholder consultation process is not required as per regulation/laws in host country. However, the project participant has consulted the stakeholders as a requirement for CDM project.	Site visit	Y
7.4 Is a summary of the stakeholder comments received provided?	PDD	DR	The summary of the stakeholder comments provided in PDD is not clear. Evidence needs to be checked during site visit.	CAR4	Y CAR4 closed
7.5 Has due account been taken of any stakeholder comments received?	PDD	DR	No adverse comment identified in the PDD. Evidence to be checked during site visit.	Site visit	Y

**Table 8 Other requirements All CDM project activities**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
<b>8.1 Project Design Document</b>					
8.1.1 Editorial issues: does the project correctly apply the PDD template and has the document been completed without modifying/adding headings or logo, format or font.	PDD	DR	The PDD template version 02 has been applied correctly.	Y	Y
8.1.2 Substantive issues: does the PDD address all the specific requirements under each header. If requirements are not applicable / not relevant, this must be stated and justified.	PDD	DR	The PDD address all the specific requirements under each header.  Foot-notes used in section E are not clear.	CAR5	Y CAR5 closed
<b>8.2 Technology to be employed</b>					
8.2.1 Does the project design engineering reflect current good practices?	PDD	DR	The project design engineering reflects the current good practices used in cement industry. The technology is supplied by KHD, Germany a pioneer in this field.  Evidence needs to be checked during site visit.	Site visit	Y
8.2.2 Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	PDD	DR	The project activity is being performed in two stages. The project consists of redesigning and retrofitting of the grate system with Omega plate type system, which will increase the cooler recuperation efficiency.  The technical specifications of the project activity need to be checked during site visit.	Site visit	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
8.2.3 Is the project technology likely to be substituted by other or more efficient technologies within the project period?	PDD	DR	Project technology will not substituted by other or more efficient technologies during the crediting period. Evidence needs to be checked.	Site visit	Y
8.2.4 Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?	PDD	DR	The project does require initial training to overcome the troubleshooting. The training has been provided by the technology supplier as per the terms and conditions mentioned in PO. The documentary evidence needs to be checked during site visit.	Site visit	Y
<b>8.3 Duration of the Project/ Crediting Period</b>					
8.3.1 Are the project's starting date and operational lifetime clearly defined and reasonable?	PDD	DR	Project activity starting date is mentioned in PDD as 15 <sup>th</sup> June 2001. Evidence for the same is to be provided.	CAR6	Y CAR6 closed
8.3.2 Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max. two x 7 years or fixed crediting period of max. 10 years)?	PDD	DR	Fixed crediting period of 10 years is selected for the project activity and it is reasonable. The project activity claims retroactive credits from 1 <sup>st</sup> February 2004.	Y  NIR7	Y  Y NIR7 closed
8.3.3 Does the project's operational lifetime exceed the crediting period?	PDD	DR	The project's operational life time is expected to be 20 years which exceeds the crediting period of 10 years.	Y	Y

**Table 9 Additional requirements for SSC project activities only**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
9.1 Does the project qualify as a small scale CDM project activity as defined in paragraph 6 (c) of decision 17/CP.7 on the modalities and procedures for the CDM?	PDD	DR	The project activity is sub-bundled project activity. As per Annex 21 of EB 21, "Project activities within a bundle can be arranged in one or more sub-bundles, with each project activity retaining its distinctive characteristics such as technology/measure, location, application of simplified baseline methodology. Project activities within sub-bundle shall not exceed the maximum output capacity limit for its type" and hence qualifies under energy efficiency project for industrial facility under small scale category.	Y	Y
9.2 The project conforms to one of the categories listed in Appendix B to Annex II to Decision 21/CP.8.	PDD	DR	Yes, AMS II-D version 7 dated 28 <sup>th</sup> November 2005.	Y	Y
9.3 The small scale project activity is not a debundled component of a larger project activity?	PDD	DR	Small scale project activity is not a debundled component of a larger project. Evidence needs to be checked during site visit.	Site visit	Y
9.4 PDD has been prepared in accordance with appendix A of Annex II to Decision 21/CP.8.	PDD	DR	The CDM - SSC - PDD (version 2) template is followed.	Y	Y
9.5 The project uses a simplified baseline and monitoring methodology specified in Appendix B. If not, they may propose changes to the meths or a new SSC project category.	PDD	DR	Yes, AMS II-D version 7 dated 28 <sup>th</sup> November 2005.	Y	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
9.6 Are the emission reductions determined in accordance with the methodology described?	PDD	DR	Provide calculation spreadsheet for emission reduction calculations.  Evidence to be provided for claim of reduction in carbon emissions from project activity.	NIR8	Y NIR8 closed
9.7 Is there any bundling of SSC activities into one PDD? If so, does the monitoring plan consider sampling of activities? Refer to para 19 of Annex II. Also, note bundling provisions in SSC Briefing Note and SSC meths I C / I D and III D and Para 22e of Appendix B.	PDD	DR	There is bundling of two SSC activities into one PDD.  Overall monitoring plan for the bundled project activity has been prepared as per UNFCCC guidelines.  Form for submission of CDM-SSC-Bundle activities needs to be provided.	NIR9	Y NIR9 closed
9.8 Is EIA required by host party? If not, none is required irrespective of SHC. If yes, has one been performed consistent with local requirements?	PDD	DR	EIA requirement for said project activity by host Party is to be checked.  Provide a copy of consent to operate and establish from Karnataka Pollution Control Board (KPCB).	CAR10	Y CAR10 closed

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
<p>9.9.The project results in emission reductions that are additional in accordance with the following requirements: (Para 26) The project is additional if emissions are reduced below those in the absence of the project.</p> <p>(Para 27) Simplified baseline can be used; if not, baseline proposed shall cover all gases, sectors and sources listed in Annex A to the KP</p> <p>(Para 28) One or more barriers as detailed in attachment A to Appendix B to Annex II will be used to demonstrate that the project would not proceed without the CDM</p>	PDD	DR	<p>The project activity will improve the energy efficiency in clinker cooler by effective trapping of the heat in clinker cooler and will reduce same amount of heat generated due to fossil fuel firing.</p> <p>The simplified baseline as per AMS.II.D has been used for the project activity.</p> <p>The technological barrier, barriers due to prevailing practise and other barrier mention in the PDD are not clear.</p> <p>Evidence needs to be provided for in support of barriers.</p>	<p>Y</p> <p>Y</p> <p>CAR11</p>	<p>Y</p> <p>Y</p> <p>CAR11 closed</p>
9.10 Leakage is calculated according to the provisions of the SSC methodologies in Appendix B.	PDD	DR	As per methodology AMS II-D para 5, leakage for the project activity is not considered as the energy efficiency is achieved due to project activity is not because of the transfer of any energy efficient equipment.	Y	Y
9.11 The project boundary shall be constructed in accordance with the requirements of the SSC meths in Appendix B	PDD	DR	Project boundary is not clear in PDD.	CAR12	Y CAR12 closed



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
9.12 The Monitoring plan shall be consistent with the requirements of the SSC methodology in Appendix B and shall provide for the collection and archiving of data needed to determine project emissions, baseline emissions and leakage.	PDD	DR	The monitoring plan for the bundled project activity is not clear.  It does not mention the time period for which the data will be available for reference.	CAR13	Y CAR13 closed
9.13 The monitoring plan shall present good monitoring practice appropriate to the circumstances of the project activity.	PDD	DR	Explain how parameter P.1 and P.2 are measured and calculated?  Clarify which calorific value is used GCV or NCV.  Provide a copy of calibration certificates for the equipments used for measurement purpose.  Provide a copy of monitoring procedures laid by the project proponent for the project activity.  Parameters mentioned in monitoring plan are not clear. Explain the need to monitor parameter P.18.  Explain the need for monitoring the baseline parameters.  Documentary evidence to be provided for assumptions used in calculation of emission reduction.	CAR14	Y  CAR14 closed
9.14 If project activities are bundled, separate monitoring plan shall be prepared for each of the activities or an overall plan reflecting good monitoring practice will be prepared, consistent with the above requirements	PDD	DR	The SSC project is a bundled project activity.  Overall monitoring plan has been prepared for the project activity which is accepted as per decision 21/CP.8 para 22 e.	Y	Y



**Table 10 Additional requirements for AR projects – Not applicable**

**Table 11 Additional requirements for SSC AR projects – Not applicable**

**Table 12 Additional information to be verified by local assessors / Site visit – Separate File attached**

### Annex 3: Overview of Findings

Each Table below represents a finding from the validation assessment. The findings are numbered consecutively, approximately in the order that they have been identified.  
[CDM.Val0765]

Description of table:

Type	Findings are either New Information Requests (NIR) or Corrective Action Requests (CAR). CARs are items that must be addressed before a project can receive a recommendation for registration. NIRs may lead to the raising of CARs. Observations are included at the end and may or may not be addressed. They are primarily to act as signposts for the verifying DOE.
Issue	Details the content of the finding
Ref	refers to the item number in the Validation Protocol
Response	Please insert response to finding, starting with the date of entry.

Rows for comments and further response will be appended to the table until the Findings has been addressed to the satisfaction of the Lead Assessor.

Please note that this is an open list and more findings may be added as validation progresses.

Date:29<sup>th</sup> Sept.2006

Raised by: Vikrant Badve

No.	Type	Issue	Ref
1	CAR	The HCA for the project activity is required to submit.	1.2
Date: 04/12/2006, The HCA has been submitted to DOE.			
Date:12/12/2006 [Vikrant Badve] [Comment from Local Assessor] Letter of Approval dated 11 <sup>th</sup> September 2006 (Ref. No. 4/16/2006-CCC) from Host country was submitted by the project proponent. The letter was verified against the original copy of the same and it can be accepted.  [Acceptance and close out] OK, Sanjeev, (12/12/2006)			

Date:29<sup>th</sup> Sept.2006

Raised by: Vikrant Badve

No.	Type	Issue	Ref
2	CAR	The list of relevant stakeholders consulted for the CDM project activity is not clear in PDD.	7.1
Date: 04/12/2006 The section of stakeholder's comment is corrected in the revised PDD and all the relevant stakeholders are included. The local population/village panchyat is added in the stakeholder.			
Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor] The list of local stakeholders given in rephrased version of the PDD is accepted as this list consists of the all concern local stakeholders for the project activity.  [Acceptance and close out] OK, Sanjeev, (12/12/2006)			

Date: 29th Sept. 2006

Raised by: Vikrant Badve

No.	Type	Issue	Ref
3	NIR	How the identified local stakeholders are being informed about the project activity. Provide documentary evidence for the same.	7.2
Date: 04 <sup>th</sup> December 2006 The project proponent has informed to local stakeholders from the letters. The same has been provided to validators.			
Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor] The letters written to Gram Panchayat Malkhed and Employees of the Rajashree Cement were made available to the validator. Same has been verified during local stakeholder consultation process and can be accepted.			
[Acceptance and close out] OK, Sanjeev, (12/12/2006)			

Date: 29th Sept. 2006

Raised by: Vikrant Badve

No.	Type	Issue	Ref
4	CAR	The summary of the relevant stakeholder comments provided in PDD is not clear.	7.4
Date: 04 <sup>th</sup> December 2006 The same is corrected in the stakeholder section of PDD and the abbreviations made clear in the same section of revised PDD.			
Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor] The correction made in the summary of the stakeholder comments in rephrased version of the PDD is accepted. The information given under the relevant section of PDD has been verified during local stakeholder consultation process.			
[Acceptance and close out] OK, Sanjeev, (12/12/2006)			

Date: 29th Sept. 2006

Raised by: Vikrant Badve

No.	Type	Issue	Ref
5	CAR	Foot notes used in section E of PDD are confusing with the numeric used in the formulae.	8.1.2
Date: 04 <sup>th</sup> December 2006 The same has been corrected in the section E of corrected PDD.			
Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor] The correction made in the rephrased version of the PDD is accepted.			
[Acceptance and close out] OK, Sanjeev, (12/12/2006)			

Date: 29th Sept. 2006

Raised by: Vikrant Badve

No.	Type	Issue	Ref
6	CAR	The starting date of project is 15 <sup>th</sup> June 2001 as mentioned in PDD. Documentary evidence is required for the verification of the same.	8.3.1
Date: 4 <sup>th</sup> December 2006 The purchase orders have been submitted for the starting date of the project. The same have			

been supported with minutes of meeting signed before the starting of the activity.

Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor]  
Purchase order copies are submitted by the project proponent.

[Acceptance and close out] OK, Sanjeev (12/12/2006)

Date: 29th Sept. 2006

Raised by: Vikrant Badve

No.	Type	Issue	Ref
7	NIR	The project is claiming for retroactive credits from 1 <sup>st</sup> February 2004. Provide documentary evidence for CDM consideration for the project activity as per tool for the demonstration and assessment of additionality version 2.	8.3.2

Date: 04<sup>th</sup> December 2006

CDM consideration is available for the project as minutes of meeting but project is not eligible for the retroactive credits due to decision of EB 23, Para 90 ("Requesting validation" requires that a project design document has been submitted to a designated operational entity by 31 December 2005. DOEs are required to have a system to deal with their documents and processes. The Board noted that the date of receipt shall be documented in such a manner that a verification in the context of re-accreditation or spot-check is possible without doubt.). The project proponent has signed validation contract before 31st Dec 2005 with the DOE (TUV Rheinland) which don't have the sectoral scope 4 and that's why the PDD was not submitted to DOE. Now at present DOE has been changes (Due to the same reason the earlier DOE doesn't have the sectoral scope 4) and calculation has been corrected in the PDD. The crediting period will start from the date of registration.

Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor]

The explanation given by the project proponent can be accepted and the crediting period for the project activity will be started from date of registration.

[Acceptance and close out] OK, Sanjeev (12/12/2006)

Date: 29th Sept. 2006

Raised by: Vikrant Badve

No.	Type	Issue	Ref
8	NIR	Provide calculation spreadsheet for emission reduction calculations. Evidence to be provided for claim of reduction in carbon emissions from project activity.	9.6

Date: [04<sup>th</sup> December 2006]

The same have been submitted to the DOE.

Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor]

The excel spreadsheet giving detailed calculation for emission reduction has been submitted by the project proponent and the same has been checked with the formulae provided in the PDD. It was found that the formulae used in excel sheet are same as given in the PDD and hence the excel sheets can be accepted. The baseline data measurement system was found in place and data used for calculating baseline was checked during validation site visit.

[Acceptance and close out] OK, Sanjeev (12/12/2006)

Date:29th Sept.2006

Raised by: Vikrant Badve

No.	Type	Issue	Ref
9	NIR	Form for submission of CDM-SSC-Bundle activities needs to be provided.	9.7
<p>Date: 04<sup>th</sup> December 2006  The filled form has been submitted to DOE.</p> <p>Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor]  The F-Bundle form for the present project activity was submitted by the project proponent. The form was checked against format of same which is in force as per CDM EB guidelines and found accepted. The form contains all relevant information as per the guidelines.</p> <p>[Acceptance and close out] OK, Sanjeev (12/12/2006)</p>			

Date:29th Sept.2006

Raised by: Vikrant Badve

No.	Type	Issue	Ref
10	CAR	Project proponent is required to submit a copy of MoEF which states that EIA is not required for the project activity.  A copy of relevant consent to operate and establish is required to provide by project proponent.	9.8
<p>Date: [04<sup>th</sup> December 2006]  The EIA is not required for the activity and the notification for the same is submitted. The relevant consents copies have been submitted to DOE.</p> <p>Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor]  The consent copies are submitted by the project proponent.</p> <p>[Acceptance and close out] OK, Sanjeev (12/12/2006)</p>			

Date:29th Sept.2006

Raised by: Vikrant Badve

No.	Type	Issue	Ref
11	CAR	The technological barrier, barriers due to prevailing practise and other barrier mention in the PDD are not clear.  Documentary evidence for Production loss due to project activity needs to be provided.  Documentary evidence needs to be provided against the claim of 'one of the first of a kind' project.  Provide IRR sheet for the present project activities.	9.9
<p>Date: 04<sup>th</sup> December 2006  The technological barriers are explained with the investment barriers in the relevant section. The letter from technology supplier has been submitted to the DOE for the first of its kind. IRR sheets have been provided to the DOE.</p> <p>Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor]  The correction made in rephrased PDD under technological barrier heading is clear. The letter from technology supplier regarding one of the first of its kind project installation was submitted by the project proponent. The letter was verified with the original and accepted.  Project proponent has submitted a copy of shut down records indicating the shut down period.</p>			

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The production loss has been calculated considering the production level during that particular time. The data used for calculation of production losses were checked during site visit from plant data.

IRR sheet for both the project activities has been submitted by the project proponent. The same were checked for the calculation of IRR. The assumptions made for calculating IRR were discussed with project proponent during site visit and found correct.

[Acceptance and close out] OK, Sanjeev (12/12/2006)

Date: 29th Sept. 2006 Raised by: Vikrant Badve

No.	Type	Issue	Ref
12	CAR	Please elaborate the project boundary.	9.11

Date: 04<sup>th</sup> December 2006

The project boundary has been elaborated in the PDD.

Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor]

The correction made in the rephrased version of the PDD is accepted.

[Acceptance and close out] OK, Sanjeev (12/12/2006)

Date: 29th Sept. 2006 Raised by: Vikrant Badve

No.	Type	Issue	Ref
13	CAR	Monitoring plan for the CDM project activity is not clear in PDD. Please mention the time period for which the archived data will be available for reference.	9.12

Date: [04<sup>th</sup> December 2006]

The same has been corrected in the section D of the PDD.

Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor]

It has been mentioned in the rephrased version of the PDD that the monitored data will be available for 2 years after the crediting period. The correction is accepted.

[Acceptance and close out] OK, Sanjeev (12/12/2006)

Date: 29th Sept. 2006 Raised by: Vikrant Badve

No.	Type	Issue	Ref
14	CAR	Explain how parameter P.1 and P.2 are measured and calculated? Clarify which calorific value is used GCV or NCV. Provide a copy of calibration certificates for the equipments used for measurement purpose. Provide a copy of monitoring procedures laid by the project proponent for the project activity. Parameters mentioned in monitoring plan are not clear. Explain the need to monitor parameter P.18. Explain the need for monitoring the baseline parameters. Documentary evidence to be provided for assumptions used in calculation of emission reduction.	9.13

Date: All the issues have been addressed in the section D of the corrected PDD. For the



assumptions the calculation given by technology supplier has been submitted.

Date: 12/12/2006 [Vikrant Badve] [Comment from Local Assessor]

The relevant corrections made in the revised PDD are acceptable.

Also the documentary evidence for assumptions used in emission reduction calculation are provided and found acceptable.

[Acceptance and close out] OK, Sanjeev (12/12/2006)