

 <p align="center">CDM Project Activity Registration and Validation Report Form (By submitting this form, designated operational entity confirms that the proposed CDM project activity meets all validation and registration requirements and thereby requests its registration)</p>	
Section 1: Request for registration	
Name of the designated operational entity (DOE) submitting this form	Det Norske Veritas Certification Ltd. (DNV)
Title of the proposed CDM project activity (Section A.1 of the attached CDM-PDD) submitted for registration	Blended Cement Project with Fly Ash – Lafarge India Private Limited
Project participants (Name(s))	Lafarge India Limited
Sector in which project activity falls	Sectoral Scope Nr. : 04 - Manufacturing industries
Is the proposed project activity a small-scale activity?	<u>Yes</u> / <u>No</u> (underline as applicable)
Section 2: Validation report	
List of documents to be attached to this validation report (please check mark):	
<input checked="" type="checkbox"/> The CDM-PDD of the project activity <input checked="" type="checkbox"/> An explanation by the submitting designated operational entity of how it has taken due account of comments on validation requirements received, in accordance with the CDM modalities and procedures, from Parties, stakeholders and UNFCCC accredited non-governmental organizations; <input checked="" type="checkbox"/> The written approval of voluntary participation from the designated national authority of each Party involved, including confirmation by the host Party that the project activity assists it in achieving sustainable development: <ul style="list-style-type: none"> ○ (Attach a list of all Parties involved and attach the approval (in alphabetical order)) <input checked="" type="checkbox"/> Other documents, including any validation protocol used in the validation <ul style="list-style-type: none"> ○ Validation Report including a validation protocol and a list of persons interviewed by the validation team during the validation process <input checked="" type="checkbox"/> Information on when and how the above validation report is made publicly available. <input checked="" type="checkbox"/> Banking information on the payment of the non-reimbursable registration fee <input checked="" type="checkbox"/> A statement signed by all project participants stipulating the modalities of communicating with the Executive Board and the secretariat in particular with regard to instructions regarding allocations of CERs at issuance.	
Executive Summary and Introduction, including <ul style="list-style-type: none"> • Description of the proposed CDM project activity • Scope of validation process (include all documentation that has been reviewed and name persons that have been interviewed as part of the validation, as applicable) • DOE Validation team (list of all persons involved in the validation, describing functions assumed in the validation) 	

Description of the proposed CDM project activity:

The project activity proposed by Lafarge India Private Limited produces Portland pozzolanic cement at their Jojobera Cement Plant. The Jojobera plant is only a grinding unit and obtains clinker from two other clinker manufacturing Lafarge units – Arasmeta and Sonadih, both located in the state of Chattisgarh, India. The project involves optimisation of clinker through the additional use of fly ash as an additive in the manufacture of Portland pozzolana cement. This is beyond current practices in the region selected, which is the eastern region of India. This increase in blending of fly ash will reduce the clinker requirement resulting in reduction of fossil fuel consumption for clinker manufacturing. The project also contributes in reducing environmental effects due to mining of limestone used for clinker manufacturing.

The total estimated emission reduction due to the project activity is approximately 34 211 t of CO₂ e per year.

Scope of validation process:

The validation scope is defined as an independent and objective review of the project design document (PDD). The PDD is reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures as agreed in the Marrakech Accords and the relevant decisions by the CDM Executive Board, including the approved baseline and monitoring methodology ACM0005 version-03. The validation team has, based on the recommendations in the Validation and Verification Manual employed a risk-based approach, focusing on the identification of significant risk for project implementation and the generation of CERs.

The following documents were reviewed:

- ☒ Lafarge India Private Limited - *Clean Development Mechanism Project Design Document – “Blended Cement Project with Fly Ash – Lafarge India Private Limited”* Version 3 of September 2006 and its earlier versions
- ☒ Indian DNA, Host country approval letter – 9 October 2006
- ☒ International Emission Trading Association (IETA) & the World Bank's Prototype Carbon Fund (PCF): *Validation and Verification Manual*. <http://www.vvmanual.info>
- ☒ ACM0005 Approved methodology Version 03 – Consolidated baseline Methodology for Increasing the Blend in Cement production
- ☒ IPCC: *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*. 2000

The following persons were interviewed:Lafarge India Private Limited:

- ☒ Mr Sivaranjan Banerjee
- ☒ Mr Kalol Basu

PwC:

- ☒ Ms Aditi Paul

The validation team consists of the following personnel:

C Kumaraswamy	DNV IndiaTeam Leader,	GHG auditor
Santhosh Jayaram	DNV India	GHG auditor, sector expert
Subhendu Biswas	DNV India	Internal Reviewer

For further details, please refer to the "Introduction" and "References" Section of DNV's Validation Report (DNV Report 2006-9026-1, rev. 02).

Description of methodology for carrying out validation

- **Review of CDM-PDD and additional documentation attached to it**
- **Assessment against CDM requirements (e.g. by use of a validation protocol)**
- **Report of findings by the DOE, e.g. by use of type of findings (e.g. corrective action requests, clarifications or observations). Please explain the way findings are "labelled" during validation.**
- **Include statements or assessments in the section "Conclusions, final comments and validation opinion" below.**

The validation consisted of the following three phases:

- i) A desk review of the project design documentation.
- ii) Follow-up interview with project stakeholders.
- iii) The resolution of outstanding issues and the issuance of the validation report and opinion.

The PDD dated 2006-09-19 submitted by Lafarge India Private Limited (and earlier versions) and additional background documents related to the project design and baseline were assessed as a part of the validation.

On the 20th February 2006, DNV performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Lafarge India Private Limited were interviewed.

In order to ensure transparency, a validation protocol has been customized for the project, according to the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from validation of the identified criteria.

Findings established during the validation can either be seen as a non- fulfilment of validation criteria or where a risk to the fulfilment of project objectives is identified. Such findings are termed Corrective Action Requests (CAR). The term Clarification may be used where additional information is needed to fully clarify an issue. The Corrective Action Requests and requests for Clarification raised by DNV were resolved through communication with the project participants. To guarantee the transparency of the validation process, the concerns raised by DNV and the response provided by the project participants are documented in the DNV's Validation Report.

For further details, please refer to the "Methodology" Section of DNV's Validation Report (DNV Report 2006-9026-1, rev. 02) and the IETA/PCF Validation and Verification Manual (www.vvmanual.info).

Explanation by the submitting designated operational entity of how it has taken due account of comments on validation requirements received, in accordance with the CDM modalities and procedures, from Parties, stakeholders and UNFCCC accredited non-governmental organizations;

- **Description of how and when the PDD was made publicly available**
- **Description of how comments were received and made publicly available**
- **Explanation of how due account has been taken of comments received**
- **Compilation of all comments received (Identify the submitter)**

The PDD of date was made publicly available on DNV's climate change website (www.dnv.com/certification/climatechange) and Parties, stakeholders and NGOs were through the CDM website invited to provide comments during a 30 days period from 12th November 2005 to 11 December 2005. One comment was received on 11th December 2005.

Please refer to the "Comments by Parties, Stakeholders and NGOs" Section of DNV's Validation Report (DNV Report 2006-9026-1, rev. 02) and the above mentioned CDM website.

Conclusions, final comments and validation opinion

- ***Provide conclusions on each requirement under paragraph 37 of the CDM modalities and procedures, describing how these requirements have been met. This shall include assessments and findings (e.g. corrective action requests, clarifications or observations) in relation to each requirement, including a confirmation that all issues raised have been addressed to the satisfaction of the DOE.***
- ***Final comments and validation opinion***

Det Norske Veritas Certification (DNV Certification) has validated the "Blended Cement Project with Fly Ash – Lafarge India Private Limited". The validation was performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to the Kyoto Protocol criteria for the CDM, the CDM rules and modalities as agreed in the Marrakech Accords and relevant decisions by the CDM Executive Board.

The review of the project design documentation (PDD) and the subsequent follow-up interviews have provided DNV with sufficient evidence to determine the fulfilment of stated criteria.

Lafarge India Private Limited is the only project participant in this project. The DNA of India has confirmed that the project assists in achieving sustainable development and has accorded the approval for the project.

The validation did not reveal any information indicating that the project can be seen as a diversion of ODA funding towards India.

The project activity will reduce clinker production and associated GHG emissions by displacing clinker with fly ash in the production of Portland pozzolana cement. Emissions arising from the calcination of limestone, fossil-fuel based kiln combustion and consumption of electrical energy will be reduced. By increasing the percentage of fly ash in the cement production, the project is expected to result in reductions of 34 211 tons of CO₂ equivalent per year that are real, measurable and gives long-term benefits to the mitigation of climate change. An analysis of relevant barriers demonstrates that the proposed project is not a likely baseline scenario and emission reductions are hence additional to any that would occur in its absence.

The project correctly applies the approved baseline methodology ACM0005, version 3 "Blended Cement Project with Fly Ash – Lafarge India Private Limited". The baseline has been selected by determining the common prevailing clinker percentage of PPC in other manufacturing plants in the selected region that use similar raw material as the project and which face similar economic, market and technical circumstances. It is justified that the proposed project activity itself is not a likely baseline scenario.

In summary, it is DNV's opinion that the project as described in the PDD of September 2006 meets all relevant UNFCCC requirements for the CDM and correctly applies the approved baseline and monitoring methodology ACM000, version 3. Hence, DNV requests the registration of the "Blended Cement Project with Fly Ash – Lafarge India Private Limited" as a CDM project activity.

For further details, please refer to DNV's Validation Report (DNV Report 2006-9026-1, rev. 02).

The DOE declares herewith that in undertaking the validation of this proposed CDM project activity it has no financial interest related to the proposed CDM project activity and that

<i>undertaking such a validation does not constitute a conflict of interest which is incompatible with the role of a DOE under the CDM.</i>		
By submitting this validation report, the DOE confirms that all validation requirements are met.	Susanne Haefeli-Hestvik	
Name of authorized officer signing for the DOE		
Date and signature for the DOE	19 Oct. 2006 <i>S. Haefeli-Hestvik</i>	
1.1.1.1 Section below to be filled by UNFCCC secretariat		
Date when the form is received at UNFCCC secretariat		
Date at which the registration fee has been received		
Date at which registration shall be deemed final		
Date of request for review, if applicable		
Date and number of registration	Date	Number