VALIDATION REPORT

CO_2 Global Solutions International

REDUCING THE AVERAGE CLINKER CONTENT IN CEMENT AT CEMEX MEXICO OPERATIONS

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Reducing the average clinker content in cement at CEMEX Mexico operations	SGS Climate Change Programme
Revision number	Client:
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Summary

SGS performed a validation of the project entitled "Reducing the average clinker content in cement at CEMEX Mexico operations", on the basis of UNFCCC criteria for CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of Kyoto Protocol, CDM modalities and procedures and the subsequent decisions by CDM Executive Board.

The validation process consisted in the following:

- A desk review of the project design, baseline and monitoring plan.
- Follow up interviews with project stakeholders; and
- The resolution of outstanding issues and the issuance of the final validation report and opinion.

In summary, it is SGS's opinion that the project, as described in the revised PDD version 2 dated 02/07/2007 meets all UNFCCC requirements for CDM and all relevant host country criteria and correctly applies the methodologies ACM0005 version 3. Hence, SGS request the registration of the "Reducing the average clinker content in cement at CEMEX Mexico Operations", as CDM project activity.

Subject.:			
CDM Validation			**Indexing terms**
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Abbreviations

CAR	Corrective Action Request
NIR	New Information Request
CDM	Clean Development Mechanism
CEF	Carbon Emission Factor
CEMEX	CEMEX de Mexico, S. A.
CER	Certified Emission Reduction
CO2	Carbon Dioxide
CO2e	Carbon Dioxide Equivalent
DNA	Designated National Authority
DOE	Designated Operational Entities
GHG	Greenhouse gas(es)
GWP	Global Warming Potential
IETA	International Emissions Trading Association
IPCC	Intergovernmental Panel on Climate Change
LoA	Letter of Approval
MP	Monitoring Plan
NGO	Non-Governmental Organization
ODA	Official Development Assistance
PDD	Project Design Document
PP	Project Participant
UNFCCC	United Nations Framework Convention on Climate Change

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1. Introduction

1.1 Objective

CO_2 Global Solutions International has commissioned SGS to perform the validation of the project: "Reducing the average clinker content in cement at CEMEX Mexico Operations" 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 reduces the average clinker content in Portland type cement Class 30R produced in 15 cement plants of CEMEX in Mexico. The project involves the reduction of clinker content through the use of additive in the manufacture of Portland cement. The average clinker percentage is expected to decrease from 78.4%, in the base year, to over 72.1% in the crediting period. The purposes of the project activity is by the clinker percentage reduction (by adding various additive materials such as pozzolan, limestone, fly ash, slag, among others) conserve natural resources such as fossil fuels and diminish the burning of fossil fuels from which temperature and electricity are obtained for cement manufacture. The project activity therefore diminishes GHG emissions from clinker production such as from a reduced consumption of electricity per unit of cement produced. The CDM project will expect a CO_2 emission reduction of 2,331,078 tCO_{2e} for a fixed crediting period of 10 years starting January 1, 2008.

1.4 The names and roles of the validation team members

Name	***Role***
Emilio Doens	*Lead Assessor*
Roy Williams	*Local Assessor*
Siddharth Yadav	*Expert*

Statement of Competence of team members are attached at Annex IV.

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.

Checklist Question	***Means of verification (MoV)***	***Comment***	***Draft and/or Final Conclusion***
The various requirements are linked to checklist questions the project should meet.	*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.*

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 Mexico. Mexico has ratified Kyoto Protocol on September 7, 2000. Initially the Letter of Approval of the Host Country DNA was not provided by the project and hence CAR (1) was raised. During the site visit the LoA was provided but had a mistake in the project name. A new LoA was provided with the correct project name hence CAR 1 is closed out.

The Project Participant for the CDM proposed project activity as is stated in the PDD is CEMEX Mexico. No Annex I Party is involved at this stage but the project would lead to emission reductions, thus assist Annex I Party in achieving their commitment a later stage.

3.2 Baseline selection and additionality

The project is applying the consolidated baseline methodology "Consolidated Baseline Methodology for Increasing the Blend in Cement Production" (ACM0005, version 3 valid since May 19, 2006) in this project. In accordance with this methodology, reference is made to the Tool for the demonstration and assessment of additionality (Version 03) to assess the additionality of the Project. The project meets the applicability criteria for the methodology applied.

The project boundary described in the PDD was considered to be consistent with the methodology used. Regarding the Baseline Emissions (BE) and Project Emissions (PE) the information in the PDD version 1 submitted was not complete to continue the assessment, hence NIR 3 was raised; In response to NIR 3 the project participant submitted an updated PDD (PDD version 2) where the explanation and consideration according to the approved methodology are given to determine the BE and PE; NIR3 was closed out.

In the PDD version 1 the "tool for the determination and assessment of additionality" version 2 was applied which is no longer valid; hence CAR 4 was raised; also the discussion on additionality was not very clear, hence CAR 5 was raised. Version 2 of the PDD was submitted applying version 3 (valid version) of the "tool for the determination and assessment of additionality" and supporting documents to assess the project's additionality, as described below; consequently CARs 4 and 5 were closed.

In PDD version 2 the project additionality is demonstrated through the application of the Tool for the demonstration and assessment of additionality version 03.
The relevant information for the analysis of additionality was presented in detail in the PDD.

Step 1 - *Identification of alternatives to the project activity consistent with current laws and regulations* -
The possible baseline scenarios are:

- Baseline scenario 1: Project activity implementation not undertaken as CDM project activity
- Baseline scenario 2: Continuation of the existing current practice in the Portland cement manufacture.
-

These alternatives meet the requirement of the Mexican standard NMX-C-414-ONNCCE-2004 for "Building Industry – Hydraulic Cement – Specifications and Testing Methods" which specifies the cement resistance of 30 N/mm^2 after 28 days.

The most likely baseline scenario is the continuation of the existing current practice in the Portland cement manufacture due to the fact that no additional investment is required and no technical or market difficulties have to be faced. In an interview, the Mexican National Cement Chamber (CANACEM) Executive Director stated that the tendency in recent years in Mexico has been to increase the clinker content in Portland cement in order to keep the quality standard required by the Mexican market.

Step 2 - *Investment analysis* – was not applied

Step 3: *Barrier Analysis* - the proposed project activity faces barriers that:

- Prevent the implementation of this type of proposed project activity; and
- Do not prevent the implementation of at least one of the alternatives.

The PP has selected Technical Barrier, Barrier due to prevailing practice and market barrier.
In order to verify the barriers to the project activity supporting documents were provided and explained by the PP during the site visit. These documents included an executive summary of the technical research and testing of the different clinker contents in Guadalajara Plant dated in 2004; also a final report on the adjustment of the kiln of Tepeaca Cement Plant; a benchmark analysis of the project. Evidence provided proved to be reasonable and genuine.

Technical Barrier:
The project implementation will require the introduction of new technologies; more research and development work on the use of different types of additives available in the region, maintaining compliance with Mexican standards, and training for the technical personnel. During the site visit the PP provided the validation team with research reports about the plants involved in the project, with details on proposed training programs for the technical personnel of the plants.

Market Barrier
In an interview with the Mexican National Cement Chamber (CANACEM) Executive Director and with Mexican Institute of Cement and Concrete (IMCYC) -General Director it was confirmed that in the local market there is a widespread customer perception that a reduction in the clinker percentage brings as consequence a reduction in the strength of the cement, compared to the conventionally accepted ordinary Portland cement. The proposed reduced clinker content cement requires longer curing and setting time; also the color variations between the ordinary Portland cement and the reduced clinker content cement also creates doubts in the market. The PP thereby had to invest in marketing, training and awareness programs facilities in order to overcome this barrier.

Barrier due to prevailing practice
A benchmark analysis has been carried out by PP which shows that the cement made by CEMEX is among the best in its class in Mexico for comparable cement quality as per the data provided by the Mexican National Cement Chamber. It was observed that in recent years the clinker content in Portland cement manufacture has increased to nearly 80%; reason why an expected final clinker content of about 72.3% (fulfilling the Mexican standards) will be the first-time in Mexico.

The alternative to the project activity is to keep the clinker ratio at the high levels observed in the base year. This alternative does not face any of the barriers identified above when compared to the project activity.

Step 4*. Common practice analysis* – As common practice in Mexico is use a high percentage of clinker in cement Class 30R. Considering the technical and utilization uncertainties for the proposed project activity, it is apparent that it was not a common practice in cement manufacturing in the host country.

Despite availability of all the above information, during the site visit it was verified that the additives availability in Mexico is ensured and found that there wouldn't be any shortage of additives during the project lifetime. The evidence provided on market and technological barriers for the project activity were accepted based on the provision of supporting documents by the client.

After reviewing the evidences provided by the PP and based on the above mentioned, it is concluded that the project activity was not a likely baseline scenario and hence additional to any which would have been done in the absence of project activity.

3.3 Application of Baseline methodology and calculation of emission factors
The project has applied the "Consolidated Baseline Methodology for Increasing the Blend in Cement Production" ACM0005/Version 03 dated 19 May 2006 under sectoral scope 4.

When the PDD version 1 was submitted no supporting documents for the emission reduction were enclosure (calculation spreadsheet); hence NIR 3 was raised. An updated PDD (version 2) was provides by PP and the ER calculation spreadsheet was also submitted. The calculation spreadsheet for the emission reductions was checked with the applicable methodology and found OK. NIR 3 was closed out.

3.4 Application of Monitoring methodology and Monitoring Plan
The project has applied approved consolidated monitoring methodology "for Increasing the Blend in Cement Production" ACM0005/Version 03 dated 19 May 2006.

The cement plants have been implementing a quality management system in accordance with ISO 9001:2000. As per the requirement of monitoring methodology and project description the monitoring

plan has been reviewed. A data management system (GrafOper and SICA) is implemented in the Cement Plants.

3.5 Project design

The Project is being developed by CEMEX Mexico and with CO_2 Global Solutions International (is not project participant) for the development of this project under the Clean Development Mechanism of the Kyoto Protocol.

The purpose of the project activity at CEMEX Mexico plants is to reduce emissions of anthropogenic CO2 in the reduction of the average clinker content in the cement of resistance Class 30R (30 N/mm2 after 28d).The reduction of the average clinker content in the cement production will result in significant reductions of CO2 emissions from combustion of fossil fuels.

The project is expected to contribute to sustainable development through:

- Reduction in the quantity of limestone required for cement production.
- Reduction of land destruction and erosions arising from such activities.
- Reduction in adverse health impacts caused from quarrying of materials on nearby habitats and ecosystem.
- Reduction of fossil fuels used for cement production.

A fixed crediting period of 10 years has been chosen with the starting date as January 1, 2008.

The annual emission reductions are expected to be 233,108 tCO_2e.

3.6 Environmental Impacts

In an interview with DNA was confirm that there is no regulatory requirement for carrying out an environmental impact assessment study for the proposed project activity according to the General Law to Environmental Protection LEGEPA art 28 (http://www.profepa.gob.mx/NR/rdonlyres/84142613-CF26-4223-B7E9-38BE4AEB0C96/4417/LEGEEPA050707.doc)

No adverse environmental impacts of the proposed project activity were reported by DNA to the local assessor. In an interview with DNA it was confirmed that the project is in compliance with the current environmental legislation in the Host Country.

3.7 Local stakeholder comments

In the PDD version 1 is stated that the local stakeholder consultation was held on April 20, 2007 and May 15, 2007. But the supporting documents were not provided to verify the information; hence NIR 14, NIR 15 and NIR 16 were raised. During the site visit the local assessor confirmed that relevant stakeholders were invited. The project provided the attendance list and other supporting documents (invitation letter, minutes of the meeting) and photos of the stakeholder consultation. NIR 14, NIR 15 and NIR 16 were closed out.

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://cdm.unfccc.int/Projects/Validation/DB/6W6JXSCQONF978UTGNHE28244LZ0HI/view.html and were open for comments from 10-05-07 until 08-06-07. 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 comments.

4.3 Explanation of how comments have been taken into account

No comments received.

5. Validation opinion

SGS has performed a validation of the project: “Reducing the average clinker content in cement at Cemex Mexico Operations”. 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 reducing the average clinker content in Portland cement manufacture, 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 technological barriers and barriers due to 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. If the project is implemented as design, the project 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.

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 undertaking such a validation does not constitute a conflict of interest which is incompatible with the role of a DOE under the CDM.

6. List of persons interviewed

Date	*Name*	*Position*	*Short description of subject discussed*
June 8th, 2007	Lucrecia Martín	Vice-director on Climate Change Projects. – Mexico DNA	LoA; Laws & regulations; Sustainable Development Policy; EIA
June 4th, 2007	Juan M. Diosdado	CEMEX Alternative Fuel Director (Energy Vicepresidency)	CEMEX strategy of sustainable development and CDM projects
June 4th, 2007	Néstor Quintero	Environmental and Quality System Manager CEMEX	Sustainable development; environmental aspects of the project
June 4th, 2007	Eduardo González	Atotonilco Plant Manager CEMEX	Additives supply and general aspects of the project
June 5th,2007	Javier Gutiérrez	Tepeaca Plant Manager CEMEX	Additives supply and general aspects of the project
June 6th,2007	Alejandro Paz	Guadalajara Plant Manager CEMEX	Additives supply and general aspects of the project
June 8th, 2007	Osmín Rendón	Mexican National Cement Chamber (CANACEM) -Chief Executive	Environmental or social benefits of the project; technical aspects of the project's process.

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/ PDD version 1dated 05-01-2007

/2/ PDD version 2 dated 28-06-2007

/3/ Letter of Approval

/4/ Modalities of Communication

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):

/5/ Emission Reduction and Financial Model.

/6/ Validation Protocol

/7/ Tool for the demonstration and assessment of additionality – version 03

/8/ ACM0005, version 03

/8/ International Emission Trading Association (IETA) & the World Bank's Prototype Carbon Fund (PCF): *Validation and Verification Manual*. http://www.vvmanual.info

8. Annexes

Annex 1: Local assessment
Annex 2: Validation Protocol
Annex 3: Overview of findings
Annex 4: Statement of Competence of Validation Team

Annex 1 Local Assessment Checklists

Project Specific criteria to be confirmed by Local Assessor

Questions be defined by team leader, Answer and Objective Evidence / Source of information / Persons Interviewed to be completed by Local Assessor; Compliance to be reviewed by Team Leader.

General questions

What to check	How to check it	Reference	Answer	Objective Evidence / Source of information / Persons interviewed	Date of site visit/ or when person was interviewed
Does the project have a Letter of Approval of Mexico? If yes, please obtain a copy.	Project developer Ministry of Enviroment	PDD Section A.3	LoA was obtained from DNA on June 5th 2007	Interview to DNA: Lucrecia Martín Vice-director on Climate Change Projects.	June 8th, 2007

Things to be checked on-site

What to check	How to check it	Reference	Answer	Objective Evidence / Source of information / Persons interviewed	Date of site visit/ or when person was interviewed
The project claims that CDM was seriously considered in the decision to proceed with the project activity. Please make copy of the evidence.	Project developer	PDD Section B.3	Yes. CEMEX has a strategy of sustainable development and CDM projects are included on it. www.cemex.com- 2006 sustainable development report	Interview to Juan M. Diosdado CEMEX Alternative Fuel Director (Energy Vicepresidency)	June 4th, 2007
Does the government of Mexico define Sustainable Development plans for Clean Development Projects under the Kyoto Protocol and if so what	Ministry of Environment	PDD Section E.1	Government of Mexico does not have a specific sustainable Development Plan, but there is a national strategy on Climate Change and the CDM	Interview to DNA: Lucrecia Martín Vice-director on Climate Change	June 8th, 2007

What to check	How to check it	Reference	Answer	Objective Evidence / Source of information / Persons interviewed	Date of site visit/ or when person was interviewed
are they and is the project in line with these plans?			project is in line with this strategy. http://www.semarnat.gob.mx/queessemarnat/cambioclimatico/Pages/cicc.aspx	Projects.	
In the absence of Sustainable Development criteria, which criteria will be monitored before, during and after project implementation?	Interview project developer	PDD B.6 and B.7	The project developer does not define a specific plan to monitor sustainable development. However, the project has a monitoring plan supported with an environmental management system (ISO 14001) that measures specific data related to environmental performance.	Interview to: Néstor Quintero Environmental and Quality System Manager CEMEX	June 4th, 2007
Is the project in line with sustainable development policies of the host country?	Ministry of Environment	PDD Section	The host country does not have a policy on SD formalized. Instead of this, all references to SD are related to Climate Change Strategic released on June 2nd 2007. The project is in line with this new strategy. Note: Interview with Climate Change Project Director Miguel Angel Cervantes is pending. This interview is necessary to complete information about the project.	Interview to DNA: Lucrecia Martin Vice-director on Climate Change Projects.	June 8th, 2007
Is the project in line with relevant legislation and plans in the host country?	Ministry of Environment	PDD	Yes, the project complies with relevant legislation in the host country.	Interview to DNA: Lucrecia Martin Vice-director	June 8th, 2007

What to check	How to check it	Reference	Answer	Objective Evidence / Source of information / Persons interviewed	Date of site visit/ or when person was interviewed
				on Climate Change Projects.	
Is the supply of additives (fly ash, pozzolan, slag, limestone) guaranteed to assure the crediting period of the project?	Site visit	PDD Section B.2	According to CEMEX, the supply of additives (mainly pozzolan) is guaranteed. In each visited cement plant, the natural stores of additives (limestone and pozzolan) are located near by the plant. At this time, there is no documental evidence (contract with suppliers) to proof the materials will be available during the crediting period.	Interview to: Eduardo González-Atotonilco Plant Manager CEMEX Javier Gutiérrez-Tepeaca Plant Manager CEMEX Alejandro Paz-Guadalajara Plant Manager CEMEX Zapotiltic Plan Manager CEMEX	June 4th,2007 June 5th,2007 June 6th,2007 June 7th,2007
Who will be the suppliers of additives for the cement process?	Site visit	PDD	At the moment of the site visit, CEMEX does not show evidence of contracts with additive suppliers to any of the 15 cement plants.	Interview to: Eduardo González-Atotonilco Plant Manager CEMEX Javier Gutiérrez-Tepeaca Plant Manager CEMEX Alejandro Paz-Guadalajara Plant	June 4th,2007 June 5th,2007 June 6th,2007 June 7th,2007

What to check	How to check it	Reference	Answer	Objective Evidence / Source of information / Persons interviewed	Date of site visit/ or when person was interviewed
				Manager CEMEX Zapotiltic Plan Manager CEMEX	
Check the installed capacity of the kiln	Site visit	PDD Section	At site visit, it was possible to check only the installed capacity of 5 cement plants. The information of 15 plants concerning capacity and production is obtained from a specific database (GrapOper). The data is attached in other files provided by project developer.	Interview to: Eduardo González-Atotonilco Plant Manager CEMEX Javier Gutiérrez-Tepeaca Plant Manager CEMEX Alejandro Paz-Guadalajara Plant Manager CEMEX Zapotiltic Plan Manager CEMEX	June 4th,2007 June 5th,2007 June 6th,2007 June 7th,2007
Does the description of host country economic situation described in the PDD represent the current situation and therefore these incentives are not likely to happen?	Ministries, websites,	PDD Section B	No information about this query was obtained.	Interview to: DNA Lucrecia Martin Vice-director on Climate Change Projects.	June 8th 2007
Does the government of the host country have requirements for an	Ministry of Environmen	PDD Section F.1	The CDM project does not need EIA according to	Interview to: DNA	June 8th 2007

What to check	How to check it	Reference	Answer	Objective Evidence / Source of information / Persons interviewed	Date of site visit/ or when person was interviewed
Environmental Impact Assessment? Check the approved EIA for the project	t		LEGEPA art 28 (Ley General de equilibrio ecológico y de protección al ambiente, General Law to Environmental Protection) http://www.profepa.gob.mx/NR/rdonlyres/84142613-CF26-4223-B7E9-38BE4AEB0C96/4417/LEGEEPA050707.doc	Lucrecia Martin Vice-director on Climate Change Projects.	
Check the approved Air Emission Monitoring Plan for the project	Ministry of Environment	PDD Section F.1	Information regarding this query will be provided by DNA	Interview to: DNA Lucrecia Martin Vice-director on Climate Change Projects.	June 8th 2007
Will the project create other environmental or social benefits than GHG emission reductions?	Ministry of Environment, Interview project developer, Cement institutions	PDD Section F	According to interview persons from DNA and cement institutions the project has other benefits that GHG reduction: 1. Fly ash (originated by thermoelectric plants) causes pollution. The utilization on cement process reduces this pollution 2. Reduction of fossil fuel consumption,	Interview to: DNA Lucrecia Martin Vice-director on Climate Change Projects. Osmín Rendón National Cement Chamber (CANACEM) -Chief Executive Daniel Dámazo Mexican Institute of Cement and Concrete (IMCYC) - General	June 5th, 2007 June 8th, 2007

What to check	How to check it	Reference	Answer	Objective Evidence / Source of information / Persons interviewed	Date of site visit/ or when person was interviewed
				Director	
When is the project expected to start? Have all preparations been made? Have people been hired? Have people been trained?	Interview project developer, staff	PDD Section A.4	The project expected to start on January 2008. Some analysis have been developed on the15 plants to proof the technical feasibility of the project but the technological changes and staff training haven't started at this time.	Interview to: Eduardo González-Atotonilco Plant Manager CEMEX Javier Gutiérrez-Tepeaca Plant Manager CEMEX Alejandro Paz-Guadalajara Plant Manager CEMEX Zapotiltic Plan Manager CEMEX	June 4th,2007 June 5th,2007 June 6th,2007 June 7th,2007
What socio-economic benefits is the project expected to deliver?	Interview project developer	PDD	No Information regarding this query were found	Project developer	June 4th, 2007
Are all permits and licenses necessary for this project in order?	Review permits and licenses	PDD	Yes, all CEMEX plants have permits and licenses to operate provided by governmental institutions. However, documental evidence is pending.	Project developer Interview to: Néstor Quintero Environmental and Quality System Manager CEMEX	June 4th, 2007
Can you check that the local stakeholder process has been performed, a public hearing was indeed	Site visit	PDD Section E	A public consultation took place during April and May in the 15 plants.	Interview to: Relationship with the local	June 4th,2007 June

What to check	How to check it	Reference	Answer	Objective Evidence / Source of information / Persons interviewed	Date of site visit/ or when person was interviewed
organized and the summary of comments received adequately reflects what was discussed? Furthermore do the local stakeholders feel their comments were taken into account properly?			During the site visit evidences were presented of the public meeting. The comments and list of participants are attached in other files provided by project developer. Note: CEMEX will provide some pictures of local stakeholder consultation.	community department (staff) List of participants, minute of the meeting.	5th,2007 June 6th,2007 June 7th,2007

ANNEX 2 VALIDATION PROTOCOL

TABLE 1 PARTICIPATION REQUIREMENTS FOR CLEAN DEVELOPMENT MECHANISM (CDM) PROJECT ACTIVITIES (REF PDD, LETTERS OF APPROVAL AND UNFCCC WEBSITE)

REQUIREMENT	MoV	Ref	Comment	Draft finding	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.	DR	Marrakech Accords, CDM Modalities §29 and §30	No Annex 1 Party is involved at this stage but the project would lead to emission reductions, thus assist Annex 1 Party in achieving their commitment a later stage	**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	DR	Marrakech Accords, CDM Modalities §29 and §30 Kyoto Protocol Art. 12.2, Marrakech Accords, CDM Modalities §40a	No LoA has been submitted for the project. CAR 1 is raised LoA has been submitted for the project; but was incorrect the project name CAR 1 still open until this error are fixed	**CAR 1**	
1.3 All Parties (listed in Section A3 of the PDD) have ratified the Kyoto protocol and are allowed to participate in CDM projects	DR	Marrakech Accords, CDM Modalities §30	All parties listed in PDD Section a.3 has been ratified KP. Mexico – Ratification date: September 7, 2000 http://maindb.unfccc.int/public/country.pl?country=MX	**Y**	**Y**
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	DR	PDD	The project apply approved baseline methodology and consolidated monitoring methodology ACM0005 version 3 *"Consolidated Baseline Methodology for Increasing the Blend*	**Y**	**Y**

REQUIREMENT	MoV	Ref	Comment	Draft finding	Concl
			in Cement Production" The project activity consists in the reduction of the average clinker content in the cement production thereby reducing the emissions associated with clinker production.		
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	DR	Marrakech Accords, CDM Modalities, §40	The PDD has been publishing for public comments on UNFCCC website from 10 May 07 - 08 Jun 07. No comment have yet been received on the project	**Y**	**Y**
1.6 The project has correctly completed a Project Design Document, using the current version and exactly following the guidance	DR	UNFCCC website	The Project has used the correct version of the PDD format available for large scale project.	**Y**	**Y**
1.7 The project shall not make use of Official Development Assistance (ODA), nor result in the diversion of such ODA	DR I	PDD	In PDD Annex 2 stated that the project not received any public funding. During the site visit was confirm in an Interview with DNA that no ODA is provided to the project.	**Y**	**Y**
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?				**N/A**	**N/A**
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				**N/A**	**N/A**
1.10 Is the current version of the PDD complete and does it clearly reflect all	DR	PDD	The current version of the PDD is complete.	**Y**	**Y**

REQUIREMENT	MoV	Ref	Comment	Draft finding	Concl
the information presented during the validation assessment?					
1.11 Does the PDD use accurate and reliable information that can be verified in an objective manner?	DR I	PDD	The PDD use accurate and reliable information. But the information TBC during the site visit. NIR 2 is raised During the site visit, was identified a data base (GrafOper) and environmental and quality management systems that support information in PDD NIR 2 is closed out	~~NIR 2~~	Y

TABLE 2 BASELINE METHODOLOGY (IES) (REF: PDD SECTION B AND E AND ANNEX 3 AND AM)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
2.1 Does the project meet all the applicability criteria listed in the methodology	DR	PDD ACM 0005 version 3	The project meets with applicability criteria of the applied methodology.	Y	Y
2.2 Is the project boundary consistent with the approved methodology	DR	PDD ACM 0005 version 3	The project's boundary is acceptable and consistent with the applied methodology	Y	Y
2.3 Are the baseline emissions determined in accordance with the methodology described	DR	PDD ACM 0005 version 3	Need to provide full reference to the data used in the calculations of baseline emissions. NIR 3 is raised During the site visit was identified that a Database (GrafOper) is used to calculate baseline emissions. Records from database were provided by project developer to verify baseline emissions. NIR 3 is closed out	~~NIR 3~~	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
2.4 Are the project emissions determined in accordance with the methodology described	DR	PDD ACM 0005 version 3	Need to provide full reference to the data used in the calculations. NIR 3 is raised During the site visit was identified that a Database (GrafOper) is used to calculate baseline emissions. Records from database were provided by project developer to verify baseline emissions. NIR 3 is closed out	~~NIR 3~~	Y
2.5 Is the leakage of the project activity determined in accordance with the methodology described	DR	PDD ACM 0005 version 3	Need to provide full reference to the data used in the calculations. NIR 3 is raised During the site visit was identified that a Database (GrafOper) is used to calculate baseline emissions. Records from database were provided by project developer to verify baseline emissions. NIR 3 is closed out	~~NIR 3~~	Y
2.6 Are the emission reductions determined in accordance with the methodology described	DR	PDD ACM 0005 version 3	The formulae used are in order; calculations should be checked using the actual data. During the site visit was identified that a Database (GrafOper) is used to calculate baseline emissions. Records from database were provided by project developer to verify baseline emissions. NIR 3 is closed out	~~NIR 3~~	Y

Table 3 Additionality (Ref: PDD Section B3 and AM)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
3.1 Does the PDD follow all the steps required in the methodology to determine the additionality	DR	UNFCCC website	The project has correctly completed the PDD, but is use the "tool for the determination and assessment of additionality" version 2. But The alternatives have not been identified in accordance with the methodology Changes have to be applied to PDD to use the last version of "tool for the determination and assessment of additionality" In Step 1, it is necessary to define alternatives according to methodology. In Step 3, it is required to explain with more details the technological and investment barriers (that were identified at site visit) and provide the evidence to support the statements. CAR 4 is raised An updated PDD (version 2) has been submitted to assess the additionality was applied the Tool for the demonstration and assessment of additionality version 3 and additional supporting documents as well were provides to let assess the additionality. CAR 4 is closed out.	~~CAR 4~~	Y
3.2 Is the discussion on the additionality clear and have all assumptions been supported by transparent and documented evidence	DR	PDD UNFCCC website	The project demonstrates additionality by using the Barrier Analysis. But the barrier analysis does not provide enough evidence to support the	~~CAR 5~~	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			statement that this project is additional. More information on the nature of the barriers and documented evidence has to be submitted. It is required to explain with more details the technological and investment barriers (that were identified at site visit) and provide the evidence to support the statements. CAR 5 is raised. An updated PDD (version 2) has been submitted to assess the additionality was applied the Tool for the demonstration and assessment of additionality version 3 and additional supporting documents as well were provides to let assess the additionality. CAR 5 is closed out		
3.3 Does the selected baseline represent the most likely scenario among other possible and/or discussed scenarios?	DR	PDD ACM 0005 version 3	The selected baseline represents the most likely scenario among other possible and/or discussed scenarios according with approved methodology.	**Y**	**Y**
3.4 Is it demonstrated/justified that the project activity itself is not a likely baseline scenario	DR	PDD UNFCCC website	The barrier analysis does not provide enough evidence to support the statement that this project is additional. More information on the nature of the barriers is requiring here and documented evidence has to be submitted. It is required to explain with more details the technological and investment barriers (that were identified at site visit)	**~~CAR 5~~**	**Y**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			and provide the evidence to support the statements. CAR 5 is raised An updated PDD (version 2) has been submitted to assess the additionality was applied the Tool for the demonstration and assessment of additionality version 3 and additional supporting documents as well were provides to let assess the additionality. CAR 5 is closed out		

Table 4 Monitoring methodology (PDD Section D and AM)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
4.1 Does the project meet all the applicability criteria listed in the monitoring methodology	DR	PDD ACM0005 ver 3	The project meet all the applicability criteria listed in the monitoring methodology ACM0005	**Y**	**Y**
4.2 Does the PDD provide for the monitoring of the baseline emissions as required in the monitoring methodology	DR	PDD ACM0005 ver 3	In PDD section B.7.1 are given all the data and parameters to be monitored	**Y**	**Y**
4.3 Does the PDD provide for the monitoring of the project emissions as required in the monitoring methodology	DR	PDD ACM0005 ver 3	In PDD section B.7.1 are given all the data and parameters to be monitored	**Y**	**Y**
4.4 Does the PDD provide for the monitoring of the leakage as required in the monitoring methodology	DR	PDD ACM0005 ver 3	In PDD section B.6.2 are given all the data and parameters for leakage to be monitored	**Y**	**Y**
4.5 Does the PDD provide for Quality Control (QC) and Quality Assurance (QA) Procedures as required in the monitoring methodology	DR	PDD ACM0005 ver 3	In PDD section B.7.1 are given the (QC) and (QA) Procedures as required in the monitoring methodology	**Y**	**Y**

Table 5 Monitoring plan (PDD Annex 4)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
5.1 Monitoring of Sustainable Development Indicators/ Environmental Impacts	DR & I	PDD & site visit	In PDD section A.2 is stated that *"The project activity contributes to sustainable development at the local, regional and global levels in the following ways: Environmental sustainability; Economic sustainability; Social sustainability".* In PDD section D.1 is stated *"The project activity under consideration does not require any Environmental Authorization from the host country as it does not fall under the project category which requires mandatory EIA study for clearance".* During the site visit the local assessor confirm in an interview with DNA that Government of Mexico does not have a specific sustainable Development Plan, but there is a national strategy on Climate Change and the CDM project is in line with this strategy. http://www.semarnat.gob.mx/queessemarnat/cambioclimatico/Pages/cicc.aspx Also during the site visit was confirm that to monitor environmental impacts produced by each cement plant, CEMEX has been implemented an environmental management system (ISO 14001) In an interview the DNA confirmed that EIA is not necessary to this project.	~~NIR 6~~	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			Refers to: General Law to Environmental Protection Art 28. Website: http://www.profepa.gob.mx/NR/rdonlyres/84142613-CF26-4223-B7E9-38BE4AEB0C96/4417/LEGEEPA050707.doc "Ley General de Equilibrio Ecológico y la Protección al Ambiente". NIR 6 is closed out		
5.1.1 Does the monitoring plan provide the collection and archiving of relevant data concerning environmental, social and economic impacts?	DR & site interviews	PDD & site visit	TBC by local assessor NIR 7 is raised During the site visit the local assessor confirm that the monitoring plan will be based on certified quality and management systems. To collect and measure environmental impacts produced by each cement plant, CEMEX will be apply environmental management system procedures. List of procedures was provide by CEMEX Q&E systems Manager NIR 7 is closed out	~~**NIR 7**~~	**Y**
5.1.2 Is the choice of indicators for sustainability development (social, environmental, economic) reasonable?	DR & I	PDD & site visit	TBC by local assessor NIR 8 is raised During the site visit the local assessor confirm in an interview with DNA that Government of Mexico does not have a specific sustainable Development Plan, but there is a national strategy on Climate Change and the CDM project is in line with this strategy. http://www.semarnat.gob.mx	~~**NIR 8**~~	**Y**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			/queessemarnat/cambioclimatico/Pages/cicc.aspx; so the has not monitored any indicators for sustainability development NIR 8 is closed out		
5.1.3 Will it be possible to monitor the specified sustainable development indicators?	DR & site interviews	PDD & site visit	TBC by local assessor NIR 8is raised During the site visit the local assessor confirm in an interview with DNA that Government of Mexico does not have a specific sustainable Development Plan, but there is a national strategy on Climate Change and the CDM project is in line with this strategy. http://www.semarnat.gob.mx/queessemarnat/cambioclimatico/Pages/cicc.aspx; so the has not monitored any indicators for sustainability development NIR 8 is closed out	~~NIR 8~~	Y
5.1.4 Are the sustainable development indicators in line with stated national priorities in the Host Country?	DR & site interviews	PDD & site visit	TBC by local assessor NIR 8 is raised During the site visit the local assessor confirm in an interview with DNA that Government of Mexico does not have a specific sustainable Development Plan, but there is a national strategy on Climate Change and the CDM project is in line with this strategy. http://www.semarnat.gob.mx/queessemarnat/cambioclimatico/Pages/cicc.aspx; so the has not monitored any indicators for sustainability development NIR 8 is closed out	~~NIR 8~~	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
5.2 Project Management Planning.					
5.2.1 Is the authority and responsibility of project management clearly described?	DR & site interviews	PDD & site visit	In PDD section B.7.2 shows a figure which describes the operational and management structure that will monitor emissions reductions generated by the project activity	**Y**	**Y**
5.2.2 Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	DR & site interviews	PDD & site visit	In PDD section B.7.2 is shows a figure which describes the operational and management structure that will monitor emissions reductions generated by the project activity	**Y**	**Y**
5.2.3 Are procedures identified for training of monitoring personnel?	DR I	PDD	No procedures have been identified. NIR 9 is raised During the site visit the local assessor confirms that the Procedures will be based on quality and environmental management systems (ISO 9001 and ISO 14001) List of procedures was provided by CEMEX Quality and Environmental Systems Manager. NIR 9 is closed out	~~**NIR 9**~~	**Y**
5.2.4 Are procedures identified for emergency preparedness for cases where emergencies can cause unintended emissions?	DR	PDD	No procedures have been identified. NIR 9is raised During the site visit the local assessor confirms that the Procedures will be based on quality and environmental management systems	~~**NIR 9**~~	**Y**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			(ISO 9001 and ISO 14001) List of procedures was provided by CEMEX Quality and Environmental Systems Manager. NIR 9 is closed out		
5.2.5 Are procedures identified for calibration of monitoring equipment?	DR	PDD	No procedures have been identified. NIR 9 is raised During the site visit the local assessor confirms that the Procedures will be based on quality and environmental management systems (ISO 9001 and ISO 14001) List of procedures was provided by CEMEX Quality and Environmental Systems Manager. NIR 9 is closed out	~~**NIR 9**~~	**Y**
5.2.6 Are procedures identified for maintenance of monitoring equipment and installations?	DR	PDD	No procedures have been identified. NIR 9 is raised During the site visit the local assessor confirms that the Procedures will be based on quality and environmental management systems (ISO 9001 and ISO 14001) List of procedures was provided by CEMEX Quality and Environmental Systems Manager. NIR 9 is closed out	~~**NIR 9**~~	**Y**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
5.2.7 Are procedures identified for monitoring, measurements and reporting?	DR	PDD	No procedures have been identified. NIR 9 is raised During the site visit the local assessor confirms that the Procedures will be based on quality and environmental management systems (ISO 9001 and ISO 14001) List of procedures was provided by CEMEX Quality and Environmental Systems Manager. NIR 9 is closed out	~~NIR 9~~	Y
5.2.8 Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)	DR	PDD	No procedures have been identified. NIR 9 is raised During the site visit the local assessor confirms that the Procedures will be based on quality and environmental management systems (ISO 9001 and ISO 14001) List of procedures was provided by CEMEX Quality and Environmental Systems Manager. NIR 9 is closed out	~~NIR 9~~	Y
5.2.9 Are procedures identified for dealing with possible monitoring data adjustments and uncertainties?	DR	PDD	No procedures have been identified. NIR 9 is raised During the site visit the local assessor confirms that the Procedures will be based on quality and	~~NIR 9~~	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			environmental management systems (ISO 9001 and ISO 14001) List of procedures was provided by CEMEX Quality and Environmental Systems Manager. NIR 9 is closed out		
5.2.10 Are procedures identified for review of reported results/data?	DR	PDD	No procedures have been identified. NIR 9 is raised During the site visit the local assessor confirms that the Procedures will be based on quality and environmental management systems (ISO 9001 and ISO 14001) List of procedures was provided by CEMEX Quality and Environmental Systems Manager. NIR 9 is closed out	~~NIR 9~~	Y
5.2.11 Are procedures identified for internal audits of GHG project compliance with operational requirements where applicable?	DR	PDD	No procedures have been identified. NIR 9 is raised During the site visit the local assessor confirms that the Procedures will be based on quality and environmental management systems (ISO 9001 and ISO 14001) List of procedures was provided by CEMEX Quality and Environmental Systems Manager.	~~NIR 9~~	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			NIR 9 is closed out		
5.2.12 Are procedures identified for project performance reviews before data is submitted for verification, internally or externally?	DR	PDD	No procedures have been identified. NIR 9 is raised During the site visit the local assessor confirms that the Procedures will be based on quality and environmental management systems (ISO 9001 and ISO 14001) List of procedures was provided by CEMEX Quality and Environmental Systems Manager. NIR 9 is closed out	~~NIR 9~~	Y
5.2.13 Are procedures identified for corrective actions in order to provide for more accurate future monitoring and reporting?	DR	PDD	No procedures have been identified. NIR 9 is raised During the site visit the local assessor confirms that the Procedures will be based on quality and environmental management systems (ISO 9001 and ISO 14001) List of procedures was provided by CEMEX Quality and Environmental Systems Manager. NIR 9 is closed out	~~NIR 9~~	Y

Table 6 Environmental Impacts (Ref PDD Section F and relevant local legislation)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
6.1 Has an analysis of the environmental impacts of the project activity been sufficiently described?	DR	PDD	In PDD section D.1 is described the environmental impacts of	Y	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			the project.		
6.2 Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	DR & site interviews	PDD & site visit DNA interview	In PDD section D.1 is stated *"The project activity under consideration does not require any Environmental Authorization from the host country as it does not fall under the project category which requires mandatory EIA study for clearance"* NIR 10 is raised The local assessor in an interview with the DNA confirmed that EIA is not necessary to this project. Refers to: General Law to Environmental Protection Art 28. Website: http://www.profepa.gob.mx/NR/rdonlyres/84142613-CF26-4223-B7E9-38BE4AEB0C96/4417/LEGEEPA050707.doc "Ley General de Equilibrio Ecológico y la Protección al Ambiente". NIR 10 is closed out.	~~**NIR 10**~~	**Y**
6.3 Will the project create any adverse environmental effects?	DR & site interviews	PDD & site visit DNA interview	The project wont expected creates any adverse environmental effects. NIR 11 is raised The local assessor in an interview to DNA confirmed that the project won't create adverse environmental effects. NIR 11 is closed out	~~**NIR 11**~~	**Y**
6.4 Are transboundary environmental impacts considered in the analysis?	DR &	PDD & site	No transboundary environmental impacts	~~**NIR 12**~~	**Y**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
	site interviews	visit DNA interview	has been considered in the analysis NIR 12 is raised The local assessor in an interview to DNA confirmed that project won't create transboundary environmental impacts. NIR 12 is closed out		
6.5 Have identified environmental impacts been addressed in the project design?	DR	PDD	Yes, identified environmental impacts have been addressed in the PDD	**Y**	**Y**
6.6 Does the project comply with environmental legislation in the host country?	DR & site interviews	PDD & site visit DNA interview	In PDD section D.1 is stated *"The project activity under consideration does not require any Environmental Authorization from the host country as it does not fall under the project category which requires mandatory EIA study for clearance"* NIR 13 is raised The local assessor in an interview with the DNA confirmed that EIA is not necessary to this project. Refers to: General Law to Environmental Protection Art 28. Website: http://www.profepa.gob.mx/NR/rdonlyres/84142613-CF26-4223-B7E9-38BE4AEB0C96/4417/LEGEEPA050707.doc "Ley General de Equilibrio Ecológico y la Protección al Ambiente". No others specific laws or regulations are applied to the project	~~**NIR 13**~~	**Y**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			NIR 13 is closed out		

Table 7 Comments by local stakeholders (Ref PDD Section G)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
7.1 Have relevant stakeholders been consulted?	DR & site interviews	PDD & site visit	In PDD section E.1 stated *"Stakeholder comments have been obtained through two routes:* ***National stakeholders:** The project participant has interviewed diverse authorities and entities (as CANACEM ("Cámara Nacional de Cementos"); Designated National Authority (DNA); IMCYC (Instituto Mexicano de Cemento y Concreto) and Cement users such as architects and civil engineers* ***Local stakeholders:** different groups from the local community for each cement plant: neighbors, personnel of the plant, local authorities"* NIR 14 is raised During site visit it was confirmed that national and local stakeholders were consulted. List of participants and summary of comments were provided by CEMEX NIR 14 is closed out	~~**NIR 14**~~	**Y**
7.2 Have appropriate media been used to invite comments by local stakeholders?	DR & site interviews	PDD & site visit DNA interview	No documented evidence has been provide NIR 15 is raised During the site visit was confirm that authorized documents by CEMEX were sent to local and	~~**NIR 15**~~	**Y**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			national stakeholders to give general information about the project and to invite to the meeting where project was explained. Evidence was provided at site visit. NIR 15 is 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?	DR & site interviews	PDD & site visit DNA interview	In PDD section D.1 is stated *"The project activity under consideration does not require any Environmental Authorization from the host country as it does not fall under the project category which requires mandatory EIA study for clearance".* So in this case a stakeholder consultation process is not required by regulations/laws in the host country. NIR 16 is raised During the site visit the local assessor confirm that no EIA is required to this project, so no stakeholder consultation process is required by law; but a public consultation took place during April and May in the 15 plants following DNA's recommendations. During the site visit evidences were presented of the public meeting. NIR 16 is closed out	~~NIR 16~~	Y
7.4 Is a summary of the stakeholder comments received provided?	DR & site interviews	PDD & site visit DNA interview	In PDD Section E.2 is stated *"No objections have been received"* June 11, 2007: A summary of local stakeholder comments was provided. All the	~~NIR 16~~	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			comments about the project were positive. NIR 16 is closed out		

TABLE 8 OTHER REQUIREMENTS

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
8.1 Project Design Document					
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.	DR	PDD	The PDD template has been correctly applied without modifications	**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	DR	PDD	Yes, the PDD address all the specific requirements in every section.	**Y**	**Y**
8.2 Technology to be employed					
8.2.1 Does the project design engineering reflect current good practices?	DR	PDD	In section A.4.3 is described the technology used by project	**Y**	**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?	DR	PDD	In section A.4.3 is described the technology used by project	**Y**	**Y**
8.3 Is the project technology likely to be substituted by other or more efficient technologies within the project period?	DR	PDD	Probably Not.	**Y**	**Y**
8.2.4 Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?	DR	PDD	In PDD Section A.4.3 is stated *"Internal training is required to ensure a successful introduction of new cement type with less clinker percentage. This training effort addresses production, testing, quality control and marketing aspects".*	**Y**	**Y**
8.3 Duration of the Project/ Crediting Period					
8.3.1 Are the project's starting date and operational lifetime clearly defined and reasonable?	DR	PDD	The project activity starting date is 01/01/2008; the operational lifetime of the	**Y**	**Y**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			project activity is estimated to about 25 years		
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)?	DR	PDD	The crediting period is a fixed period of 10 years	**Y**	**Y**
8.3.3 Does the project's operational lifetime exceed the crediting period	DR	PDD	The project's operational lifetime have been estimated to about 25 years which clearly exceed the crediting period.	**Y**	**Y**

Annex 3 FINDINGS OVERVIEW

Findings from validation of Reducing the Average Clinker Content in Cement at CEMEX Mexico Operations – CDMVal1088.

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

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: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
1	CAR	No LoA has been submitted for the project	1.2
Date: 11/06/2007 LoA has been submitted; but has an error in the Project name. A fixed LoA has been submitted by PP.			
Date: 23/07/2007 Emilio Doens: CAR 1 still open until the error is fixed. Date: 13/08/2007 Emilio Doens: the LoA is correct .CAR 1 is closed out			

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
2	NIR	The PDD use accurate and reliable information. But the information TBC during the site visit.	1.11
Date: 11/06/2007 During the site visit, Local Assessor identified that the PP are using a data base (GrafOper) and environmental and quality management systems are implemented that support information in PDD			
Date:23/07/2007 Emilio Doens: The PP uses a Data Base and has a QMS implemented that information in PDD is reliable. NIR 2 is closed out.			

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
3	NIR	Need to provide full reference to the data used in the calculations.	2.3/2.4 2.5 / 2.6
Date: 11/06/2007 During the site visit was identified that a Database (GrafOper) is used to calculate baseline emissions. Records from database were provided by project developer to verify GHG emissions.			
Date:23/07/2007 Emilio Doens: The information provide by PP has been review and found correct. NIR 3 is closed out.			

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
4	CAR	The project has correctly completed the PDD, but is use the "tool for the determination and assessment of additionality" version 2. But The alternatives have not been identified in accordance with the methodology Changes have to be applied to PDD to use the last version of "tool for the determination and assessment of additionality" In Step 1, it is necessary to define alternatives according to methodology. In Step 3, it is required to explain with more details the technological and investment barriers (that were identified at site visit) and provide the evidence to support the statements.	3.1
Date: 11/06/2007 An updated PDD (version 2) has been submitted by PP; to assess the additionality was applied the Tool for the demonstration and assessment of additionality version 3 and additional supporting documents as well were provides to let assess the additionality.			
Date: 23/07/2007 Emilio Doens: the supporting documents provided by PP have been reviewed given evidence that let assess the project additionality. CAR 4 is closed out			

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
5	CAR	The project demonstrates additionality by using the Barrier Analysis. But the barrier analysis does not provide enough evidence to support the statement that this project is additional. More information on the nature of the barriers and documented evidence has to be submitted. It is required to explain with more details the technological and investment barriers (that were identified at site visit) and provide the evidence to support the statements.	3.2 / 3.4
Date: 11/06/2007 An updated PDD (version 2) has been submitted to assess the additionality was applied the Tool for the demonstration and assessment of additionality version 3 and additional supporting documents as well were provides to let assess the additionality.			
Date: 23/07/2007 Emilio Doens: the supporting documents provided by PP have been reviewed given evidence that let assess the project additionality. CAR 5 is closed out			

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
6	NIR	In PDD section A.2 is stated that *"The project activity contributes to sustainable development at the local, regional and global levels in the following ways: Environmental sustainability; Economic sustainability; Social sustainability".* In PDD section D.1 is stated *"The project activity under consideration does not require any Environmental Authorization from the host country as it does not fall under the project category which requires mandatory EIA study for clearance".*	5.1

Date: 11/06/2007

During the site visit the local assessor confirm in an interview with DNA that Government of Mexico does not have a specific sustainable Development Plan, but there is a national strategy on Climate Change and the CDM project is in line with this strategy.

http://www.semarnat.gob.mx/queessemarnat/cambioclimatico/Pages/cicc.aspx

Also during the site visit was confirm that to monitor environmental impacts produced by each cement plant, CEMEX has been implemented an environmental management system (ISO 14001). In an interview the DNA confirmed that EIA is not necessary to this project. Refers to: General Law to Environmental Protection Art 28.

Website: http://www.profepa.gob.mx/NR/rdonlyres/84142613-CF26-4223-B7E9-38BE4AEB0C96/4417/LEGEEPA050707.doc

"Ley General de Equilibrio Ecológico y la Protección al Ambiente".

Date: 23/07/2007
Emilio Doens: following interview with DNA was confirmed the stated in PDD section A.2 and D.1. NIR 6 is closed out

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
7	NIR	the monitoring plan provide, the collection and archiving of relevant data concerning environmental, social and economic impacts have to be confirm during the site visit	5.1.1

Date: 11/06/2007
During the site visit the local assessor confirm that the monitoring plan will be based on certified quality and management systems (QS&MS). To collect and measure environmental impacts produced by each cement plant, CEMEX will be apply environmental management system procedures. List of procedures was provide by CEMEX Q&E systems Manager

Date: 23/07/2007
Emilio Doens: followjng confirmation that the monitoring plan will be based on certified QS&MS. NIR 7 is closed out

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
8	NIR	The indicators for sustainability development (social, environmental, economic) are reasonable. This have to be confirm by Local Assessor	5.1.2 / 5.1.3 / 5.1.4

Date: 11/06/2007
During the site visit the local assessor confirm in an interview with DNA that Government of

Mexico does not have a specific sustainable Development Plan, but there is a national strategy on Climate Change and the CDM project is in line with this strategy. http://www.semarnat.gob.mx/queessemarnat/cambioclimatico/Pages/cicc.aspx; so the project has not monitored any indicators for sustainability development
Date: 23/07/2007 Emilio Doens: following interview with DNA it was confirmed that the host country does not have a specific Sustainable Development Plan so the project has not monitored any indicators for sustainable development. NIR 8 is closed out

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
9	NIR	No procedures have been identified.	5.2.3 / 5.2.4 / 5.2.5/ 5.2.6/ 5.2.7/ 5.2.8/ 5.2.9/ 5.2.10/ 5.2.11/ 5.2.12/ 5.2.13.
Date: 11/06/2007 During the site visit the local assessor confirms that the Procedures will be based on quality and environmental management systems (ISO 9001 and ISO 14001). List of procedures was provided by CEMEX Quality and Environmental Systems Manager.			
Date: 23/07/2007 Emilio Doens: following confirmation that the procedures will be based on certified quality and environmental management systems (ISO 9001 and ISO 14001). NIR 9 is closed out			

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
10	NIR	In PDD section D.1 is stated *"The project activity under consideration does not require any Environmental Authorization from the host country as it does not fall under the project category which requires mandatory EIA study for clearance"*	6.2
Date: 11/06/2007 The local assessor in an interview with the DNA confirmed that EIA is not necessary to this project. Refers to: General Law to Environmental Protection Art 28. Website: http://www.profepa.gob.mx/NR/rdonlyres/84142613-CF26-4223-B7E9-38BE4AEB0C96/4417/LEGEEPA050707.doc; "Ley General de Equilibrio Ecológico y la Protección al Ambiente".			
Date:23/07/2007 Emilio Doens: following interview with DNA it was confirmed that an EIA is not necessary for this project; hence NIR 10 is closed out			

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
11	NIR	The project wont expected creates any adverse environmental effects.	6.3

Date: 11/06/2007 The local assessor in an interview to DNA confirmed that the project won't create adverse environmental effects.
Date: 23707/2007 Emilio Doens: after the interview with DNA was confirm that no adverse environmental effects will produces by the project NIR 11 is closed out

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
12	NIR	No transboundary environmental impacts have been considered in the analysis.	6.4
Date: 11/06/2007 The local assessor in an interview to DNA confirmed that project won't create transboundary environmental impacts.			
Date: 23/07/2007 Emilio Doens: after the interview with DNA was confirm that no transboundary environmental impacts will produce by the project NIR 12 is closed out.			

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
13	NIR	In PDD section D.1 is stated *"The project activity under consideration does not require any Environmental Authorization from the host country as it does not fall under the project category which requires mandatory EIA study for clearance"*	6.6
Date: 11/06/2007 The local assessor in an interview with the DNA confirmed that EIA is not necessary to this project. Refers to: General Law to Environmental Protection Art 28. Website: http://www.profepa.gob.mx/NR/rdonlyres/84142613-CF26-4223-B7E9-38BE4AEB0C96/4417/LEGEEPA050707.doc; "Ley General de Equilibrio Ecológico y la Protección al Ambiente". No others specific laws or regulations are applied to the project			
Date:23/07/2007 Emilio Doens: following interview with DNA it was confirmed that an EIA is not necessary for this project; hence NIR 13 is closed out			

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
14	NIR	In PDD section E.1 stated *"Stakeholder comments have been obtained through two routes:* ***National stakeholders:** The project participant has interviewed diverse authorities and entities (as CANACEM ("Cámara Nacional de Cementos"); Designated National Authority (DNA); IMCYC (Instituto Mexicano de Cemento y Concreto) and Cement users such as architects and civil engineers* ***Local stakeholders:** different groups from the local community for each cement plant: neighbors, personnel of the plant, local authorities"*	7.1
Date: 11/07/2007 During site visit it was confirmed that national and local stakeholders were consulted. List of			

participants and summary of comments were provided by CEMEX
Date: 23/07/2007 Emilio Doens: The PP provided documented evidence about the entire stakeholder consultation process; hence NIR 14 is closed out

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
15	NIR	Regarding whit appropriate media been used to invite comments by local stakeholders no documented evidence has been provides .	7.2
Date: 11/06/2007 During the site visit was confirm that authorized documents by CEMEX were sent to local and national stakeholders to give general information about the project and to invite to the meeting where project was explained. Evidence was provided at site visit.			
Date: 23/07/2007 Emilio Doens: The PP provided documented evidence about the entire stakeholder consultation process; hence NIR 15 is closed out			

Date: 30/05/2007 Raised by: Emilio Doens

No.	Type	Issue	Ref
16	NIR	In PDD section D.1 is stated *"The project activity under consideration does not require any Environmental Authorization from the host country as it does not fall under the project category which requires mandatory EIA study for clearance".* So in this case a stakeholder consultation process is not required by regulations/laws in the host country.	7.3/ 7.4
Date: 11/06/2007 During the site visit the local assessor confirm that no EIA is required to this project, so no stakeholder consultation process is required by law; but a public consultation took place during April and May in the 15 plants following DNA's recommendations. During the site visit evidences were presented of the public meeting.			
Date:23/07/2007 Emilio Doens: The PP provided documented evidence about the entire stakeholder consultation process; hence NIR 16 is closed out			

Observations:

Annex 4 Statement of Competence of Validation Team

Statement of Competence

Name:Emilio Doens SGS Affiliate:Panama

Status

- Product Co-ordinator ☒
- Operations Co-ordinator ☐
- Technical Reviewer ☐
- Expert ☒

	Validation	Verification
- Local Assessor	☒	☒
- Lead Assessor	☒	☒
- Assessor / Trainee Lead Assessor	☐	☐

Scopes of Expertise

1. Energy Industries (renewable / non-renewable) ☒
2. Energy Distribution ☐
3. Energy Demand ☐
4. Manufacturing ☐
5. Chemical Industry ☐
6. Construction ☐
7. Transport ☐
8. Mining/Mineral Production ☒
9. Metal Production ☐
10. Fugitive Emissions from Fuels (solid,oil and gas) ☐
11. Fugitive Emissions from Production and ☐

Consumption of Halocarbons and Sulphur Hexafluoride

12. Solvent Use ☐
13. Waste Handling and Disposal ☐
14. Afforestation and Reforestation ☐
15. Agriculture ☐

Approved Member of Staff by Siddharth Yadav Date: 15-06-2007

Statement of Competence

Name:Roy Williams Goti SGS Affiliate:Panama

Status

- Product Co-ordinator ☐
- Operations Co-ordinator ☒
- Technical Reviewer ☐
- Expert ☐

	Validation	Verification
- Local Assessor	☐	☐
- Lead Assessor	☐	☐
- Assessor / Trainee Lead Assessor	☒	☒

Scopes of Expertise

1. Energy Industries (renewable / non-renewable) ☐
2. Energy Distribution ☐
3. Energy Demand ☐
4. Manufacturing ☐
16. Chemical Industry ☐
17. Construction ☐
18. Transport ☐
19. Mining/Mineral Production ☐
20. Metal Production ☐
21. Fugitive Emissions from Fuels (solid,oil and gas) ☐
22. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride ☐
23. Solvent Use ☐
24. Waste Handling and Disposal ☐
25. Afforestation and Reforestation ☐
26. Agriculture ☐

Approved Member of Staff by Siddharth Yadav Date: 15/06/2007

Statement of Competence

Name:Siddharth Yadav SGS Affiliate:SGS United Kingdom Ltd.

Status

- Product Co-ordinator ☒
- Operations Co-ordinator ☐
- Technical Reviewer ☒
- Expert ☒

	Validation	Verification
- Local Assessor	☐	☐
- Lead Assessor	☒	☒
- Assessor / Trainee Lead Assessor	☒	☒

Scopes of Expertise

1. Energy Industries (renewable / non-renewable) ☒
2. Energy Distribution ☐
3. Energy Demand ☐
4. Manufacturing ☒
5. Chemical Industry ☐
6. Construction ☐
7. Transport ☒
8. Mining/Mineral Production ☒
9. Metal Production ☐
10. Fugitive Emissions from Fuels (solid,oil and gas) ☐
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride ☐
12. Solvent Use ☐
13. Waste Handling and Disposal ☒
14. Afforestation and Reforestation ☐
15. Agriculture ☐

Approved Member of Staff by Marco van der Linden Date: 24-04-07

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