

FINDINGS OVERVIEW

FINDINGS FROM VALIDATION OF “USE OF BLAST FURNACE SLAG IN THE PRODUCTION OF BLENDED CEMENT AT VOTORANTIM CIMENTOS”. CDM.VAL0223

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: 25/11/2005

Raised by: Aurea Nardelli/Fabian Gonçalves

No.	Type	Issue	Ref
1	CAR	Monitoring is not in compliance with all methodology requirements (units. Collection of data).	4.2/4.3/4.4

Date: 01/12/2005

The monitoring procedure was revised according to the methodology. Please refer to Section D of the PDD - Version 2.

Date: 24/02/2006 – Fabian Gonçalves / Aurea Nardelli.

[Acceptance and close out] Section D of the PDD was revised to attend the methodology. CAR 1 has been closed out.

Date: 25/11/2005

Raised by: Aurea Nardelli/Fabian Gonçalves

No.	Type	Issue	Ref
2	CAR	No monitoring of sustainable indicators/environmental impacts are presented in the PDD.	5.1

Date: 01/12/2005

Regarding environmental impacts:

The project activity is developed in six plants involving three States: São Paulo, Rio de Janeiro and Minas Gerais. The monitoring of environmental impacts of the project activity is made according to the requirements of the environmental agency in each State. However, as the project

activity does not result in significant environmental impacts, the Agencies did not require any special or continuous monitoring. When requested by the environmental agencies, monitoring is provided. As clarified in the Section F.2 of the PDD, two evidences support this fact:

- The State environmental agencies did not require the EIA/RIMA (Environmental Impact Assessment and Report) in the environmental licensing process.
- The State environmental agencies issued the environmental licenses without special requirements regarding environmental impacts mitigation and monitoring.

In addition:

- The verification of project atmospheric emissions, wastewater generation and solid residues final disposal was approved by the environmental agency as of the issuance of the license.
- Emergency plans and safety programs were developed and implemented, in accordance with Votorantim Cimentos current practices and environmental legislation.

Regarding sustainable development indicators:

As explained in Section A.2 of the PDD, the project activity contributes to Sustainable Development for several reasons:

- Project activity contributes to the reduction of energy consumption in the cement manufacture chain and consequently to the conservation of energy resources. The increase in the use of blast furnace slag in the place of clinker reduces energy demand in cement manufacture and mining of limestone.
- The reduction of fossil fuel consumption also results in the reduction of local air pollution.
- The reduced use of clinker helps in the conservation of non-renewable reserves of limestone.
- Because less limestone is used, limestone mining activities are reduced. It results in important local environmental benefits, such as, mitigation of local air pollution, reduction of biodiversity loss, and soil and landscaping conservation at mining sites.
- Blast furnace slag is an important industrial residue that requires adequate final disposal. The use of this residue as raw material helps mitigating this problem, reducing the risks of soil and water contamination due to inadequate landfilling of slag.
- The project activity also helps mitigating Climate Change because of the significant reductions of direct and indirect greenhouse gases emissions.

Votorantim Cimentos has a corporate environmental performance indicator that measures the evolution of several environmental aspects in the operations of the plants, including those ones affected by the project activity.

The environmental performance indicator is called IDA (*Indicador de Desempenho Ambiental*). It encompasses energy use, water use, raw material substitution, co-processing and co-firing of alternative materials and fuels among others.

Additionally, the incomes from the CDM will indirectly support and stimulate Votorantim Cimentos in keeping and improving its social programs already developed with the local community and

employees. Information is available at the company website:
http://www.votorantim-cimentos.com/responsabilidade/principais_acoes.shtml

Please, also refer to Section F of the revised PDD – Version 2.

Date: 24/02/2006 – Fabian Gonçalves / Aurea Nardelli.

[Acceptance and close out]: The explanation was accepted. The revised PDD includes the information above. CAR 2 has been closed out.

Date: 25/11/2005

Raised by: Aurea Nardelli/Fabian Gonçalves

No.	Type	Issue	Ref
3	NIR	Section F.1 mention that the project activity did not result in additional environmental impact. Provide more information about any requirement from environmental agency.	6.1

Date: 01/12/2005

The project activity was implemented in six cement plants located in three different states. Each one of the plants has its own environmental license issued by the corresponding State environmental agency. For all cases no special requirements, as well as no environmental impact assessments (EIA/RIMA), were requested by the environmental agencies. This is an evidence that significant environmental impacts were not resultant from the project activity. The environmental licenses are available at the project sites. Copies were provided to the validator. Please, also refer to Section F of the revised PDD – Version 2.

Date: 24/02/2006 – Aurea Nardelli.

[Acceptance and close out] Each plant has its own environmental license issued by the corresponding State Environmental Agency. Licenses were verified during the site visit and copies were provided to SGS. NIR 3 has been closed out.

Date: 25/11/2005

Raised by: Aurea Nardelli/Fabian Gonçalves

No.	Type	Issue	Ref
4	CAR	The project was not correctly apply the PDD template; the document was modified (Page 1 of the PDD it was excluded: “version 02 – in effect as of: 1 July 2004”).	8.1.1

Date: 01/12/2005

The PDD used is in accordance with the most recent version available at the UNFCCC website: <http://cdm.unfccc.int/Reference/Documents>. Please, verify the referred link.

Date: 24/02/2006 – Fabian Gonçalves / Aurea Nardelli.

[Acceptance and close out] Used the most recent version. CAR 4 has been closed out.

Date: 25/11/2005

Raised by: Aurea Nardelli/Fabian Gonçalves

No.	Type	Issue	Ref
5	NIR	No information about training requirements was provided d in the PDD.	8.2.4

Date: 01/12/2005

Training was required for the operation of the new slag dryer. For the new cement mills, the same training procedures of the previous mills are used. New routines had to be established for the quality control of slag, they were included in the QA/QC procedures for raw materials and products. The logistics of slag did not involve a new procedure/training but resulted in new activities with transport, supply chain, logistics suppliers, storage and movement of slag inside the sites. Relevant procedures are available at the project sites, which copies were provided to the

validator. Please, also refer to Section D.4 of the revised PDD - Version 2.

Date: 24/02/2006 – Aurea Nardelli.

[Acceptance and close out] : Procedures were verified during site visit. In addition, it was verified that the operators and managers have knowledge about their responsibilities and tasks. PDD was revised accordingly to include additional information. NIR 5 has been closed out.

Date: 25/11/2005

Raised by: Aurea Nardelli/Fabian Gonçalves

No.	Type	Issue	Ref
6	NIR	The barriers presented need to be confirmed. Barrier 1, why is difficult to obtain debt funding for this type of project activity. Provide more information, data.	3.2

Date: 01/12/2005

Information about the barriers faced by the project activity was presented during the site visit. Actually, barrier 1 is not the most important barrier among the set of seven barriers presented. The most important barriers faced by the project activity are barriers 3, 4, 5 and 7. Please verify Section B.3 of the revised PDD.

Date: 24/02/2006 – Aurea Nardelli.

[Acceptance and close out] : The explanation is accepted and confirmed during site visit. PDD is revised to clarify this issue. NIR 6 was closed out.

Date: 24/02/2006

Raised by: Aurea Nardelli/Fabian Gonçalves

No.	Type	Issue	Ref
7	CAR	There are not procedures identified for project performance reviews before data is submitted for verification.	5.2.12/5.2.13

Date: 15/03/2006

The procedure is:

1 – Each plant included in the project activity has its own monitoring procedures and best practices concerning instrument calibration, instrument maintenance, instrument operation, data acquisition and data recording for the set of variable and parameters of the monitoring plan. These procedures and best practices are available at the project sites.

2 – Each project plant is responsible for acquiring the set of monitoring data. The site Process Engineer advised by the site Environment Technician will collect the data and feed them into the Excel spreadsheet “Votorantim Clíntquer – CERs Calculation.xls” (see attached file). The set of data is obtained from the following sources:

2.1 – Electronic supervisory system used in plant operations: production of clinker, production of blended cement, consumption of additives, electricity consumption, self generated electricity, fuel consumed for self generated electricity.

2.2 – Sales receipts: fuel purchased, slag purchased, cement sold.

2.3 – Laboratory: CaO and MgO contents of clinker and raw material.

2.4 – Transportation supplier: quantity of slag transported, fuel consumption in transportation and distance covered in transportation.

3 – Votorantim's Corporate Environment Coordinator will gather the data from the plants and submit it to Ecoinvest so that a revision is made in order to verify inconsistencies in the calculations before each verification.

Date: 16/03/2006 – Aurea Nardelli.

[Acceptance and close out] : The procedure was accepted. CAR 7 was closed out.