



## 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)*

### Section 1: Request for registration

<b>Name of the designated operational entity (DOE) submitting this form</b>	Det Norske Veritas Certification Ltd. (DNV)
<b>Title of the proposed CDM project activity (Section A.1 of the attached CDM-PDD) submitted for registration</b>	Quimvale and Gas Natural Fuel Switch Project
<b>Project participants (Name(s))</b>	Quimvale and Gas Natural
<b>Sector in which project activity falls</b>	Sectoral Scope Nr. 1 – Process Industry
<b>Is the proposed project activity a small-scale activity?</b>	<del>No</del> / <u>Yes</u> (underline as applicable)

### Section 2: Validation report

**List of documents to be attached to this validation report (please check mark):**

- ☒ The CDM-PDD of the project activity
- ☒ 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 (Note: Included in DNV's Validation Report (DNV report 2006-0649, rev. 02));
- ☒ 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:
  - (Attach a list of all Parties involved and attach the approval (in alphabetical order))
- ☒ Other documents, including any validation protocol used in the validation
  - Validation Report (DNV Report 2006-0649, rev. 02) including a validation protocol and a list of persons interviewed by the validation team during the validation process
- ☒ Information on when and how the above validation report is made publicly available.
- ☒ Banking information on the payment of the non-reimbursable registration fee
- ☒ 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

- 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:**

Quimvale is a chemical installation that produces  $\text{CaCO}_3$  (precipitate). In order to produce  $\text{CaCO}_3$ , a sequence of chemical reactions and drying out processes for the final product are required. The project activity consists of the investment in adapting the previous boiler (used for the drying out process), which utilized fuel oil to one which utilizes natural gas.

The estimated amount of GHG emission reductions from the project is calculated to be 116 520 tCO<sub>2</sub>e during the fixed 10 years credit period, resulting in estimated average annual emission reductions of 11 652 tCO<sub>2</sub>e.

- **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, the simplified modalities and procedures for small-scale CDM project activities and the relevant decisions by the CDM Executive Board, including the approved baseline and monitoring methodologies AMS-I.D and AMS-III.E. 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 risks for project implementation and the generation of CERs.

The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

- **Documents reviewed:**

Qumivale and Gas Natural and EcoSecurities: Project Design document for the Qumivale and Gas Natural Fuel Switch project Version 1 (20<sup>th</sup> December 2005)

Qumivale and Gas Natural and EcoSecurities: Project Design document for the Qumivale and Gas Natural Fuel Switch project Version 2 (14<sup>th</sup> April 2006)

Qumivale and Gas Natural and EcoSecurities: Project Design document for the Qumivale and Gas Natural Fuel Switch project Version 3 (29<sup>th</sup> September 2006)

Quimvale Fuel price and emissions calculation datasheet.

International Emission Trading Association (IETA) & the World Bank's Prototype Carbon Fund (PCF): Validation and Verification Manual.

Appendix B of the simplified modalities and procedures for small-scale CDM project activities: Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories, Type III.B "Switching fossil fuels. Version 09: 28 July 2006.

Brazilian Mines and Energy Ministry: Balanço Energético Nacional - BEN 2004 (Brazilian Energy Data Profile), Item 1.3 Unidades

- **Persons interviewed during the validation:**

Pedro Muniz – Quimvale

Rodrigo Brandão – Quimvale

Michiel ten Hoopen – Ecosecurities

Luis Filipe Kopp – Ecosecurites

• **DOE Validation team:**

- |                                     |                         |   |
|-------------------------------------|-------------------------|---|
| <input checked="" type="checkbox"/> | Mr. Luis Filipe Tavares | DNV Rio de Janeiro, CDM auditor           |
| <input checked="" type="checkbox"/> | Mr. Soumik Biswas       | DNV Kolkata, CDM auditor                  |
| <input checked="" type="checkbox"/> | Ms. Susanne Haefeli     | DNV Oslo, Team leader, Technical reviewer |
| <input checked="" type="checkbox"/> | Mr. Michael Lehmann     | DNV Oslo, Sector expert                   |

For further details, please refer to the "Introduction" and "References" Section of DNV's Validation Report (DNV Report 2006-0649, 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:

- I a desk review of the project design and the baseline and monitoring methodology
- II follow-up interviews with project stakeholders
- III the resolution of outstanding issues and the issuance of the final validation report and opinion.

In order to ensure transparency, a validation protocol was customised for the project, according to the Validation and Verification Manual. The protocol shows in transparent manner criteria (requirements), means of verification and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements a CDM project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

Findings established during the validation can either be seen as a non-fulfilment of validation protocol criteria or where a risk to the fulfilment of project objectives is identified. Corrective Action Requests (CAR) are 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 certified.

The term Clarification is used where additional information is needed to fully clarify an issue.

For further details, please refer to the "Methodology" Section of DNV's Validation Report (DNV Report 2006-0649, rev. 02) and the IETA/PCF Validation and Verification Manual

([www.vvmanual.info](http://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 20 December 2005 was made publicly available on DNV's climate change website ([www.dnv.com/certification/climatechange](http://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 30 December 2005 to 28 January 2006. No comments were received.

Please refer to the "Comments by Parties, Stakeholders and NGOs" Section of DNV's Validation Report (DNV Report 2006-0649, 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 Ltd. (DNV) has performed a validation of the Quimvale and Gas Natural Fuel Switch Project at Barra do Piraí Municipality, Rio de Janeiro State, Brazil. The validation was performed on the basis of UNFCCC criteria for CDM project activities, small-scale CDM projects and relevant Brazilian criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting and subsequent EB decisions.

The project participants are Quimvale of Brazil and Gas Natural SDG S.A. of Spain. The host Party Brazil and the Annex I Party Spain meet all relevant participation requirements.

Quimvale is a calcium carbonate producer. The project comprises fuel oil replacement with natural gas by refurbishment of a boiler.

The baseline scenario assumes that fuel oil would continue to be used during the crediting period. Emission reductions will thus be achieved through the use of natural gas, a fuel with a carbon emission factor that is lower than the carbon emission factor of the previously used fuel, fuel oil. By promoting the use of a cleaner fuel, the project is in line with the current sustainable development priorities of Brazil.

The project applies the appropriate simplified baseline methodology AMS-III.B version 9. The baseline methodology has been applied correctly and the assumptions made for the selected baseline scenario are sound. It is sufficiently demonstrated that the project is not a likely baseline scenario and that emission reductions attributable to the project are additional to any that would occur in the absence of the project activity.

The project's application of the methodology is correct and the determination of the baseline is

transparent and IPCC default emission factors are correctly used.

The monitoring methodology has been correctly applied. The monitoring plan sufficiently specifies the monitoring requirements of the main indicators. Responsibilities and authorities for project management, monitoring procedures and QA/QC procedures are assured by the company's ISO 9001:2000 Quality Management System.

The forecast emission reductions are based on accurate data and realistic assumptions. Given the continuous operation as planned, the project will result in emission reductions that are real, measurable and contribute to the long-term goal of mitigating climate change.

Local stakeholder comments were invited according to the Brazilian DNA Resolution 1. Public stakeholder input has also been invited via the UNFCCC web-site, but no comments have been received.

In summary, it is DNV's opinion that the Quimvale and Gas Natural Fuel Switch Project, as described in the revised and resubmitted project design document of 29 September 2006, meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria and correctly applies the baseline and monitoring methodology AMS-III.B version 9. Hence, DNV requests the registration of the Quimvale and Gas Natural Fuel Switch Project project. as a CDM project activity.

For further details, please refer to DNV's Validation Report (DNV Report 2006-0649, 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 undertaking such a validation does not constitute a conflict of interest which is incompatible with the role of a DOE under the CDM.

By submitting this validation report, the DOE confirms that all validation requirements are met.

Name of authorized officer signing for the DOE

Susanne Haefeli

Date and signature for the DOE

2 October 2006

#### **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