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	
Name of the designated operational entity (DOE) submitting this form	Det Norske Veritas Certification Ltd. (DNV)
Title of the proposed CDM project activity (Section A.1 of the attached CDM-PDD) submitted for registration	Methane Recovery and Electricity Generation Project GCM 23
Project participants (Name(s))	Granjas Carroll Mexico, Cargill International S.A., EcoSecurities Ltd.
Sector in which project activity falls	Sectoral Scope Nr. : 01- Energy industries (renewable - / non-renewable sources) 13 - Waste handling and disposal
Is the proposed project activity a small-scale activity?	Yes / ~~No~~ *(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;
- ☑ 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:
  - o (Attach a list of all Parties involved and attach the approval (in alphabetical order))
- ☑ Other documents, including any validation protocol used in the validation
  - o Validation Report 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:

The objective of the project is to mitigate animal effluent related GHG emissions by improving the animal waste management at Granjas Carroll Mexico's (GCM) Farm 16 consisting of two sites: 16-3a and 16-3c located in Jalacingo, Veracruz, México.

The project activity consists of the construction of a new covered in-ground anaerobic reactor that will utilize the organic material of manure which is currently treated in the wastewater ponds from the sites listed above to produce biogas. The biogas produced in the anaerobic digester will be captured and used to generate electricity on-site. Currently, the operations covered under the project rely on electricity from the Mexican grid. With the implementation of the project activity, electricity will henceforth be supplied by renewable biogas, displacing thus grid electricity. Surplus biogas, where produced, will be flared rather than released to the atmosphere.

The project's average annual emission reduction forecast is 5 428 tonnes of CO_2 equivalents (tCO_2e) over a fixed crediting period of 10 years.

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 simplified baseline and monitoring methodologies AMS-III.D (version 09) and AMS-I.D (version 08). 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 following documents were reviewed:

- ☑ EcoSecurities Ltd.: *CDM-SSC-PDD for the "*Methane Recovery and Electricity Generation Project GCM 23*"*, Version 01 dated 08 August, 2006 and Version 02 dated 18 September 2006.
- ☑ Ministry of Environment and Natural Resources (DNA of Mexico): *Letter of approval*, 8 September 2006
- ☑ Department of Environment, Food and Rural Affairs (DEFRA) (DNA United Kingdom): *Letters of Approval*, 15 September 2006.
- ☑ Swiss Agency for the Environment, Forests and Landscape (SAEFL) (DNA of Switzerland): *Letters of Approval*, 18 September 2006.
- ☑ EcoSecurities Ltd. *Spreadsheet for baseline calculation*, 18 September 2006
- ☑ EcoSecurities Ltd: *Spreadsheets for the Calculation of the Mexican Grid Emission Factor,* April 2006.
- ☑ IPCC: 1996 IPCC Guidelines – Reference Manual, 1996
- ☑ CDM Executive Board: *Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories – Category III.D. Methane recovery (AMS-III.D),* version 09 of 12 May 2006
- ☑ CDM Executive Board: *Indicative simplified baseline and monitoring methodologies for*

selected small-scale CDM project activity categories – Category I.D. Grid connected renewable electricity generation', version 08 of 03 March 2006

☑ Secretaría de Energía (SENER): *Emisiones del Sector Eléctrico (CFE Y LFC)*, http://www.sener.gob.mx/wb2/SenerNva/ibEse last time accessed on 17 August 2006

☑ Secretaría de Energía (SENER): *Prospectiva del Sector Eléctrico 2005 – 2014, Prospectiva del Sector Eléctrico 2004-2013 & Prospectiva del Sector Eléctrico 2003- 2012*, http://www.sener.gob.mx/wb2/SenerNva/iiPro514 last time accessed on 17 August 2006

☑ Comisión Federal de Electricidad (CFE): *Listado de centrales generadoras,* http://www.cfe.gob.mx/es/LaEmpresa/generacionelectricidad/lisctralesgeneradoras/ last time accessed 17 August 2006

☑ NOM-001-SEMARNAT-1996 *Norma Oficial Mexicana, que establece los limites máximos permisibles de contaminantes en las descargas de aguas residuales en aguas y bienes nacionales.*

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

The following persons were interviewed:

☑ Jorge Landa, Project Manager GCM

☑ Matthieu Dumas, EcoSecurities, Ltd.

☑ Paloma Sarria, Ecosecurities, Ltd.

☑ Kushaana Kushaana, Project Manager, UEM Inc.

☑ Humberto Canto Bonilla General Director, GO Sistemas Ambientales

☑ Miguel Cervantes, Mexican DNA

The validation team consists of the following personnel:

Mr Gustavo Godínez	DNV México City, México	Team leader
Mr Alfonso Capuchino	DNV México City, México	GHG auditor
Mr Sergio Cabral	DNV México City, México	GHG auditor
Mr Luis Filipe Tavares	DNV Rio de Janeiro, Brazil	Sector expert
Mr Michael Lehmann	DNV Oslo, Norway	GHG auditor, Technical reviewer

For further details, please refer to the "Introduction" and "References" Section of DNV's Validation Report (DNV Report 2006-1351, rev. 02).

Description of methodology for carrying out validation

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

The validation consisted of the following three phases:

i) A desk review of the project design documentation.

ii) Follow-up interview with project stakeholders.

iii) The resolution of outstanding issues and the issuance of the validation report and opinion.

The PDD (Version 01 dated 08 August, 2006 and Version 02 dated 18 September 2006) submitted by EcoSecurities Ltd. and additional background documents related to the project design and baseline were assessed as part of the validation. During the site visit, DNV also reviewed the project's permits regarding water discharge.

In the period of 22 August 2006 to 25 August 2006, DNV performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of the farm owner GCM, the technology providers UEM, Inc. and GO Sistemas Ambientales, S.A. de C.V., EcoSecurities and the Mexican DNA were interviewed.

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

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

For further details, please refer to the "Methodology" Section of DNV's Validation Report (DNV Report 2006-1351, rev. 02*) and the IETA/PCF Validation and Verification Manual (www.vvmanual.info).*

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

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

The PDD of 08 August 2006 was made publicly available on DNV's climate change website (www.dnv.com/certification/climatechange) and Parties, stakeholders and NGOs were through the CDM website invited to provide comments during a 30 days period from 12 August 2006 to 10 September 2006. No comments were received.

Please refer to the "Comments by Parties, Stakeholders and NGOs" Section of DNV's Validation Report (DNV Report 2006-1351, 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 meet. 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 "Methane Recovery and Electricity Generation Project GCM 23" in Mexico. The validation was performed on the basis of UNFCCC criteria for the Clean Development Mechanism and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

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

The project participants are EcoSecurities Ltd. of the United Kingdom, Cargill International S.A. of Switzerland and Granjas Carroll México, S.de R.L. de C.V of Mexico. The host Party México and the participating Annex I Parties Switzerland and the United Kingdom meet the requirements to participate in the CDM. Letter of Approvals, including authorization of the project participants, by the DNA of México, Switzerland and the United Kingdom have been obtained.

Having an installed capacity of less than 15 MW and having project emissions of less than 25 000 tonnes CO_2 equivalents per year, the project is eligible as type I and type III small-scale CDM project activity, respectively.

The project correctly applies the simplified baseline and monitoring methodology AMS-III.D (version 09) and AMS-I.D (version 08).

By treating swine manure in an anaerobic digester, by capturing generated methane and by flaring the captured methane or by utilising it to generate renewable energy, which will displace grid electricity, the project results in reductions of CH_4 and CO_2 emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the project is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity.

The project's average annual emission reduction forecast is 5 428 tonnes of CO_2 equivalents over a fixed crediting period of 10 years. The emission reduction forecast has been checked and it is deemed likely that the state amount is achieved given that the underlying assumptions do not change.

Adequate training and monitoring procedures will be implemented according to the schedule of the project.

In summary, it is DNV's opinion that the project, as described in the project design document version 02 dated 18 September 2006, meets all relevant UNFCCC requirements for the CDM, is eligible as category I.D and III.D small-scale CDM project activity and correctly applies the approved simplified baseline and monitoring methodologies AMS-I.D (version 08) and AMS-III.D (version 09). Hence, DNV requests the registration of the "Methane Recovery and Electricity Generation Project GCM 23" as a CDM project activity.

For further details, please refer to DNV's Validation Report (DNV Report 2006-1351, 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.	Susanne Haefeli-Hestvik

Name of authorized officer signing for the DOE			
Date and signature for the DOE	20 Sep. 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