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.2 of the attached CDM-PDD) submitted for registration	Nanjing Tianjingwa Landfill Gas to Electricity Project
Project participants (Name(s))	Nanjing Green Waste Recovery Engineering Co., Ltd. (authorized by China) and Ecosecurities Group Ltd. (authorized by UK)
Sector in which project activity falls	Sectoral Scope 13, Waste Handling and Disposal
Is the proposed project activity a small-scale activity?	No.

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 2005-1240, rev. 01));
- ☑ The written approval of voluntary participation from the designated national authority of each Party involved, including confirmation by the host Party hat the project activity assist it in achieving sustainable development:
  - o Letter of Approval by the DNA of China
  - o Letter of Approval by the DNA of UK
- ☑ Other documents, including any validation protocol used in the validation.
  - o DNV's Validation Report (DNV report 2005-1240, rev. 01), including a validation protocol and a list of persons interviewed by DNV 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 Border and the secretariat in particular with regard to instructions regarding allocation 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)**

The Nanjing Tianjingwa Landfill Gas to Electricity Project is a landfill gas collection and utilization project in the Pukou District, Nanjin City, China. The Project will have an electricity component with maximum installed capacity reaching 6 MW. This project is expected to avoid 246 107 tCO2e of emissions per year and 1 722 746 tCO2e during the first 7 years.

The validation scope is an independent and objective review of the Project Design Document (PDD). The PDD was reviewed against Kyoto Protocol criteria for the CDM, the CDM modalities and procedures as agreed in the Marrakech Accords and relevant decision by the CDM Executive Board. The validation team has, based one the recommendation in the IETA/PCF Validation and Verification Manual, and employed a risk-based approach, focusing on the identification of significant risks for the project implementation and the generation of CERs.

The following documents were reviewed:
/1/ Ecosecurities, CDM PDD, May and October 2005.
/2/ Chinese DNA, Letter of Approval, 26 July 2005.
/3/ UK DNA, Letter of Approval, 6 October 2005.
/4/ Ecosecurities, Financial and GHG emission analysis of Nanjing Tianjingwa Landfill Gas to Electricity project in China, May and October 2005.
/5/ International Emission Trading Association (IETA) & the World Bank's Prototype Carbon Fund (PCF): Validation and Verification Manual. http://www.vvmanual.info
/6/ Approved consolidated baseline and monitoring methodology ACM0001: Consolidated baseline and monitoring methodology for landfill gas project activities.
/7/ 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, AMS-I.D. Renewable energy generation for a grid.
/8/ EB 16 Report Annex 1: Tool for the demonstration and assessment of additionality
/9/ Jiangsu Province Equipment Limited Company and Engineering Consulting Center, Project Feasibility Study Report, May 2004.
/10/ State Power Environmental Protection Research Institute, Environmental Impact Assessment report, December 2002.

The following persons were interviewed:

Chen YI and Pu Shi Gui, Nanjing Green Waste Recovery Engineering Co., Ltd,

Chen Le and Jonathan Avis, EcoSecurities Group Ltd.

Guang Yisong, The Chinese Renewable Energy Industries Association

The validation team consisted of the following personnel:

Mr. HaoXiang Jiang	DNV Certification China	Team Leader, GHG auditor
Mr. Wilson Tang	DNV Certification China	GHG auditor
Mr. Tsuyoshi.Nakao	DNV Certification Japan	GHG auditor & landfill sector expert
Ms. Susanne Haefeli	DNV Certification Norway	Technical reviewer

For further details, please refer to the "Introduction" and "References" Sections of DNV's Validation Report (DNV Report 2005-1240, rev. 01).

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 of the project started in May 2005. The validation consisted of the following three phases:

i) a desk review of the project design documents (May-July 2005);
ii) follow-up interview with project stakeholders (11-13 July);
iii) the resolution of outstanding issues and the issuance of the validation report and opinion (August-October 2005).

The Project Design Document originally submitted by EcoSecurities in May 2005 and resubmitted with minor changes in October 2005, and additional background documents related to the project design and baseline were reviewed during the validation (refer to above list of documents).

In the period of 11 July – 13 July 2005, DNV performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review.

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 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 the validation team were resolved through communications 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 Table 3 of the Validation Protocol in Appendix A of DNV's Validation Report (DNV report 2005-1240, rev. 01).

For further details, please refer to the "Methodology" Section of DNV's Validation Report (DNV Report 2005-1240, rev. 01) and the IETA/PCF Validation ad 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)**

DNV Certification published the PDD of May 2005 on the DNV Climate Change web site (http://www.dnv.com/certification/ClimateChange) and stakeholders were through the UNFCCC CDM web site invited to provide comments within a 30 days period from 4 June 2005 to 3 July 2005. One comment was received and made publicly available on DNV's Climate Change website.

The comment (in unedited form) and how DNV has taken due account of the comment received is given in the "Comments by Parties, stakeholders and NGOs" Section of DNV's Validation Report (DNV Report 2005-1240, rev. 01)

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 validated the "Nanjing Tianjingwa Landfill Gas to Electricity Project" in China, on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board.

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 consists of the capturing of landfill gas, which is then flared and used for electricity generation.

The project participants are Nanjing Green Waste Recovery Engineering Co., Ltd, and Ecosecurities. Letters of Approval have been received by the Chinese and UK DNA.

The project correctly applies the approved baseline and monitoring methodologies ACM0001 and AMS-I.D. The determination of the baseline is well elaborated, transparent and sufficiently supported with facts. The selected baseline scenario, i.e. the continued atmospheric release of landfill gas is reasonable for the first 7 years crediting period of 2005-2012. Moreover, an analysis of the economic attractiveness of the project alternative without the revenue from CO_2 credits demonstrates that the project is not a likely baseline scenario. With regards to the grid emission factor calculation, for the grid electricity baseline CO_2 coefficient, approach b) of AMS-I.D. has been chosen i.e. the weighted average emissions of the current generation mix. The energy content of coal is 29.31 TJ/tonne, based on official and published data in China. The grid CO_2 coefficient is 0.874 and fixed ex-ante for the first crediting period.

By collection and combustion of methane, the project results in the reduction of GHG emissions that are real, measurable and give long-term benefits and that are additional to what would have occurred in the absence of the project.

The GHG emission calculations are documented in a complete and transparent manner. The algorithm and methodologies for accounting GHG emissions are appropriate and emission factors are deemed to be of sufficient accuracy.

Detailed responsibilities and authorities for project management, monitoring and reporting and QA/QC procedures have been developed.

In summary, it is the validation team's opinion that the "Nanjing Tianjingwa Landfill Gas to Electricity Project", as described in the project design documentation of October 2005, meets all relevant UNFCCC requirements for the CDM and correctly applies the approved baseline and monitoring methodologies ACM0001 and AMS-I.D. Hence, DNV requests the registration of the "Nanjing Tianjingwa Landfill Gas to Electricity Project" as CDM project activity.

For further details, please refer to the "Validation Findings" Section and Table 1 of the Validation Protocol in Appendix A of DNV's Validation Report (DNV Report 2005-1240, rev. 01).

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	11 October 2005 		
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