VALIDATION REPORT

Rumos Construções Ambientais Ltda.

PROBIOGAS-JP – João Pessoa Landfill Gas Project

SGS United Kingdom Ltd | SGS House, 217-221 London Road, Camberley, Surrey GU15 3EY **Tel** +44 (0)1276 697810 **Fax** +44 (0)1276 697888
Registered in England No. 1193985 Rossmore Business Park, Ellesmere Port, Cheshire CH65 3EN www.sgs.com
Member of SGS Group (Société Générale de Surveillance)

Date of issue:	Project No.:
30 October 2007	CDM.Val0817
Project title	Organisational unit:
PROBIOGAS – JP – João Pessoa Landfill Gas Project.	SGS Climate Change Programme
Revision number	Client:
02	Rumos Construções Ambientais Ltda.

Summary
This report summarizes the results of the validation of the project, performed on the basis of UNFCCC criteria. The validation has been performed as a desk review of the project documents presented by Rumos Construções Ambientais Ltda and a validation assessment to João Pessoa Landfill, where staff from the company was interviewed. 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 has provided SGS with sufficient evidence to determine the fulfilment of the stated criteria.
The emission reductions from João Pessoa landfill will be achieved through flaring the LFG collected.
Total estimated amount of emission reductions for the first crediting period (7 years) is 1,478,057 t CO_2e.
The SGS will request the registration of the PROBIOGAS – JP – João Pessoa Landfill Gas Project as a CDM project activity, once the written approval by the DNA of the participating Parties and the confirmation by the DNA of Brazil that the project assists in achieving sustainable development has been received.

This revision only differs from the original version (revision number 00) because of the LoA from the DNA of Brazil and some minor editorial changes (typo's) in the text.

Subject.:			
CDM validation			**Indexing terms**
Work carried out by			
Fabian Gonçalves – Lead Assessor Geisa Principe – Local Assessor			
Technical review			
Irma Lubrecht.			☒ No distribution without permission from the Client or responsible organisational unit
Authorized signatory			
Siddharth Yadav			☐ Limited distribution
Date of final decision: 30/10/2007	Number of pages: 37		☐ Unrestricted distribution

Abbreviations

AM	Approved Methodology
CAR	Corrective Action Request
CER	Certified Emission Reduction
DNA	Designated National Authority
MP	Monitoring Plan
NIR	New Information Request
PDD	Project design Document
SGS	Société Générale de Surveillance
EF	Emission Factor

Table of content

1. Introduction

1.1 Objective

The Rumos Construções Ambientais Ltda has commissioned SGS to perform the validation of the project: João Pessoa Landfill Gas Project 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 purpose of the project activity is to collect landfill gas (LFG) at the João Pessoa Landfill and combust the extracted LFG over a seven years period utilizing a high efficiency enclosed flare, thereby reducing greenhouse gas (GHG) emissions and generating Certified Emissions Reductions (CER).

The João Pessoa Landfill is located in the city of João Pessoa, Paraíba, Brazil. The João Pessoa landfill attends five cities, achieving a total amount of 1.500 tons of waste per day (João Pessoa city is responsible for 1.200 tons/day), and is projected to receive around 8.000.000 tons of waste until 2020.

The project will involve the construction of a landfill gas collection system consisting of collection pipeline, transportation pipelines, blower system and flaring system. To combust the LFG collected from the site, an enclosed flare with full process controls and instrumentation will also be constructed and operated.

The emission reductions from João Pessoa landfill will be achieved through flaring the collected LFG.

Total estimated amount of emission reductions for the first crediting period (7 years) is 1,478,057 t CO_2e.

Baseline Scenario:
The project baseline is total atmospheric release of the landfill gas.

With-project scenario:
Construction of a landfill gas collection system and flaring/destruction of captured landfill gas.

Leakage:

No leakage needs to be accounted for in this project. However, the methodology ACM0001 requires that quantities of electricity or any other fuels required for operating the landfill gas project, including the pumping equipment for the collection system and energy required to transport heat, should be monitored.
In the project activity, electricity consumption is associated with the blower system used to draw landfill gas to the enclosed drum flare, and the total emission resulting from electricity consumption is considered in the total project emissions. Emissions from electricity consumption over the crediting period have been estimated to be 1,610 tCO_2 e.

Environmental and social impacts:
No significant environmental impacts are expected due to the project activity. A system for collection and treatment of the condensate generated will be installed. The sanitary water will be properly collected and treated to comply with local environmental regulations. The carbon dioxide component of landfill gas is considered to be a natural product of the carbon cycle. In the combustion of landfill gas, carbon dioxide is additionally produced, but this is also considered to be part of the natural carbon cycle and not of anthropogenic origin. There is minimal visual impact from the flare. Other potential impacts, such as noise and vibration from the blower and flare will be limited to site.

Positive environmental impacts are expected, as decreasing of landfill gas emissions and odour and reduction of leachate accumulation.

1.4 The names and roles of the validation team members

Name	***Role***
Fabian Gonçalves – SGS Brazil	*Lead assessor*
Geisa Principe – SGS Brazil	*Local assessor*
Irma Lubrecht – SGS NL	*Technical reviewer*

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

Host Party: Brazil is listed as the host Party. Brazil ratified the Kyoto Protocol on 23rd August 2002. (http://unfccc.int/files/essential_background/kyoto_protocol/application/pdf/kpstats.pdf).

At time of the validation, no Letter of Approval from the host country had been provided. The Letter of Approval will be signed when the DNA of Brazil has received and analyzed the validation report. Letter of approval issued on 04 May 2007.

3.2 Baseline selection and additionality

The methodology applied to the project is the Approved Consolidated Baseline methodology ACM 0001 - "Consolidated baseline methodology for landfill gas project activities" and "Consolidated monitoring methodology for landfill gas project activities" (version 5).
ACM 0001 is applicable to landfill gas capture project activities, where the baseline scenario is the partial or total atmospheric release of the gas (as verified in João Pessoa landfill, total release) and the project activities include the situation where the captured gas is flared.

João Pessoa project's boundary is the site of the project activity where the gas is captured and destroyed. It is consistent with ACM 0001.
The methodology defines that project proponents should provide an ex-ante estimate of emissions reductions, by projecting the future GHG emissions of the landfill using verifiable methods.
The total methane emissions in the absence of the João Pessoa project activity were estimated based on the waste tonnage of the landfill using a United States Environmental Protection Agency (USEPA) first-order kinetic model for landfill gas.
The relevant information for the baseline analysis and additionality had been presented in the PDD.
The project demonstrated additionality discussing and presenting evidences for each condition required in ACM0001. The methodology requires the use of the "Tool for the demonstration and assessment of additionality".
The project is likely to mitigate GHG emissions by implementing a landfill gas collection system, generating less methane emissions than emitted under the baseline scenario, where the LFG is totally released to atmosphere.

Step 0 is not applicable because the crediting period of the project activity will start (expected in October 2007) after the registration.

The "Tool" sub-step 1a requires to define alternative scenarios available to the project participants or similar project developers that provide outputs or services comparable with the CDM project activity.

Sub-step 1a in the PDD did not define alternatives to the project activity. NIR 2 was raised.

The "Tool" has options to define alternatives for the project. The project activity defined the continuation of the current situation as the only alternative for the project activity. There is no legal requirement that obligates the landfill to destroy the methane. NIR 2 was closed out.

Step 2: The destruction of methane via the project activity would not result in income other than that derived through CERs. The project is not financially attractive, only through registration as a CDM

project. The assessment team verified that the implementation of the project requires investment. The financial analysis estimated a similar project cost.

Investment analysis: according to the PDD the only economic benefit is the CDM income, so option I is applicable. sub-step 2b presents the costs to implement the project activity. To present the investment worksheet and related documents. CAR 3 was raised.

The implementation of the project requires investment. The financial analysis presented is estimated because the project will be implemented only in the end of 2007. CAR 3 was closed out.

Step 4: It was verified that LFG recovery is not practiced in Brazil, except in those under CDM. There is not legal requirement for the collection and combustion of landfill gas.

The sub-step 4b discuss similar activities are been carried out. According to the "Tool" other CDM projects activities can not be included in this analysis. CAR 4 was raised.

The LFG recovery is not practiced in Brazil, except in those under CDM. There is no legal requirement for the collection and combustion of the landfill gas. CAR 4 was closed out.

Step 5: the CDM registration will facilitate and allow the implementation of the proposed project activity and ensure its financial viability.

The issue related to legal requirements was verified by the local assessor. It was confirmed that there is no requirement for collection and flare of LFG in João Pessoa landfill.

It was confirmed that it's not a business as usual.

3.3 Application of Baseline methodology and calculation of emission factors

As described in the PDD, the landfill gas not captured by the landfill gas collection and flaring system cannot be monitored, as this emission is diffused over the landfill. The amount of landfill gas collected and destroyed by combustion can be monitored using a flow meter. Project emissions are thus comprised of the quantity of methane collected and not flared due to flaring inefficiency, and this amount is subtracted from the measured amount of collected methane (expected efficiency is upwards of 90%). Electricity and thermal energy emission reductions do not apply to the project João Pessoa.

ACM 0001 is applicable to landfill gas capture project activities, where the baseline scenario is the partial or total atmospheric release of the gas and the project activities include the situation where the captured gas is flared.

A new version of the methodology ACM0001 is available at the UNFCCC website. To present up dated version of the PDD considering the new ACM0001 version 05. To review section B.1 of the PDD (date and version). CAR 1 was raised. PDD was revised according methodology ACM0001 version5. CAR 1 was close out.

No leakage effects need to be accounted under ACM 0001. However the methodology defines that the electricity required for the operation of the project activity should be accounted and monitored (electricity imported). In João Pessoa project, electrical consumption will be associated with the blower system used to draw landfill gas to the enclosed drum flare, which corresponds to 3 000 MWh/year.

Project proponents will account for CO2 emissions by multiplying the quantity of electricity required with the CO2 emissions intensity of the electricity displaced. In João Pessoa project, CO2 emissions resulting from electricity consumption will be deducted from the total emission reductions.

3.4 Application of Monitoring methodology and Monitoring Plan

The data that will be collected or used to monitor emissions from the project activity are defined according to the ACM0001 (version 5).

Some items are not according methodology ACM0001:

- Data unit of the Landfill gas temperature;

- Data unit of the Landfill gas pressure;

There are no items 1 and 5 of the methodology. CAR 6 was raised.

The requested information was included in the PDD version 2 (landfill gas temperature and pressure, item 5 – temperature of the flare and item 1 is not applicable). CAR 6 was closed out.

No monitoring of baseline emissions is required in the João Pessoa project, as the baseline scenario is the total uncontrolled landfill gas releasing to atmosphere. Monitoring methodology is based on the direct measurement of the quantity of LFG captured, collected and destroyed by the LFG management system. As defined in ACM0001, no leakage needs to be considered, but electricity required for the operation of the project activity should be accounted and monitored.

The project has not been implemented yet. There are no procedures. After registration all procedures will be described and available to the Verification Team.

Observation 1: Regarding project management and procedures: Specific procedure needs to be available before project operation and during verification assessment (procedures for measurements, reporting, monitoring data adjustments, review of reported data/ results, internal audit, review data before verification assessment, corrective action).

3.5 Project design

The project should correctly complete a Project Design Document, using the current version and exactly following the guidance, without modifying/adding headings or logo, format or font. The specific requirements should be addressed under each header. The PDD mention about item E.4 and D2.4, however these items are not in the template of the PDD version 03.1. CAR 5 was raised. Corrections made in the PDD version2. CAR 5 was closed out.

3.6 Environmental Impacts

No significant adverse environmental impact due to the project activity is expected.

During desk study and validation assessment, the landfill environmental license was available to confirm that the project is in compliance with national environmental legal requirements. It was provided Operation license for the Landfill, LO Nº 329/2006, issued by SUDEMA (Superintendência de Administração do Meio Ambiente). Copy of the document was provided to SGS.

The license for the project activity has not been issued yet.

Observation 2: The project activity will request the license for the landfill gas system. The applicable license needs to be available for the verification assessment and the project needs to comply with all environmental requirements according to the license that will be issued by State Environmental Agency.

3.7 Local stakeholder comments

The stakeholder consultation shall follow the DNA requirements: “Resolution n° 1 (2003/09/11) Brazil”.

It was confirmed that the invitation was sent to specific stakeholders:

- Municipal Administration of João Pessoa – PB.
- Municipal Legislation Chamber of João Pessoa – PB;

- Sate Prosecutor's Office;
- The Brazilian NGO Forum;
- SUDEMA – Superintendência de Administração do Meio Ambiente;
- Environment Secretary of State;
- Rotary club of João Pessoa – PB.

It was verified that PROBIOGAS - JP submitted the letters on 2 and 3rd October, 2006 (by checking the formal records of post office and interview). No comments were received.

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/YP9Z7NZBWJ4ONRZSDT9KWWGMHIB24I/view.html and were open for comments from 05 Dec 2006 until 3 Jan 2007. Comments were invited through the UNFCCC CDM homepage

4.2 Compilation of all comments received

Comment number	*Date received*	*Submitter*	*Comment*
1			

No comments received.

4.3 Explanation of how comments have been taken into account

No comments received.

5. Validation opinion

Steps have been taken to close out 6 findings. The observation raised does not preclude the validation of the project, but should be considered as an opportunity for improvement for the verification process.
SGS has performed a validation of the project: João Pessoa Landfill Gas Project.
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.

By collecting landfill gas (LFG), 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 additionality presented demonstrates that the proposed project activity 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. If the project is implemented as designed, 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.

6. List of persons interviewed

Date	***Name***	***Position***	***Short description of subject discussed***
12 January 2007	Mauricio Rovea	Consultant	
12 January 2007	Eduardo	Project Developer	Validation process and findings.

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/ Project Design Document, PROBIOGAS - JP, version 01, 08 November 2006; version 02, 12 January 2007.

/2/ Approved consolidated baseline methodology ACM0001 - “Consolidated baseline methodology for landfill gas project activities” (Version 5, 22 December 2006).

/3/ Approved consolidated monitoring methodology ACM0002 - “Consolidated methodology for grid-connected electricity generation from renewable sources” (Version 6, 19 May 2006).

/4/ Tool for the demonstration and assessment of additionality (28 November, 2005).

/5/ Tool to determine project emissions from flaring gases containing methane.

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):

/6/ Operation License.

/7/ Financial worksheet.

/8/ CER worksheet.

Annex 1 - Local assessment checklist – CDM.Val0817

This checklist is designed to provide confirmation of in-country data and information provided in the Project Design Document. It serves as a "reality check" on the project. It is to be completed by a local assessor from SGS Brazil

Issue	Findings	Source /Means of Verification	Further action / clarification / information required?
Verify plant of the landfill and project.	Verified aerial photo and photos of the site were provided.	DR/ site visit	No
Confirm that there are no current regulation requiring removal of methane for safety considerations	Verified that there no legal requirement and the environmental agency does not require any burning of methane for safety purposes. Operation license, Nº. 0329 valid till 10/03/2007, issued by SUDEMA (Superintendência de Administração do Meio Ambiente). This information was verified in the landfill license. The license for the project activity will be requested before project implementation.	DR/ site visit	No

ANNEX 2 Validation Protocol

VALIDATION PROTOCOL

THIS VALIDATION PROTOCOL IS DESIGNED TO ENSURE THAT THE PROJECT MEETS THE REQUIREMENTS FOR CDM PROJECTS THAT ARE DETAILED IN PARAGRAPH 37 OF THE CDM MODALITIES AND PROCEDURES. EACH REQUIREMENT IS COVERED IN A SEPARATE TABLE. THE FOLLOWING REQUIREMENTS ARE DISCUSSED IN THIS PROTOCOL:

Requirement	Description	
Participation requirements	The participation requirements as set out in Decision 17/CP7 need to be satisfied	Covered in table 1
Baseline and monitoring methodology	The baseline and monitoring methodology complies with the requirements pertaining to a methodology previously approved by the Executive Board	Baseline methodology is covered in table 2 Monitoring methodology is covered in table 4
Additionality	The project activity is expected to result in a reduction in anthropogenic emissions by sources of greenhouse gases that are additional to any that would occur in the absence of the proposed project activity	Covered in table 3
Monitoring plan	Provisions for monitoring, verification and reporting are in accordance with relevant decisions of the COP/MOP	Covered in table 5
Environmental impacts	Project participants have submitted to the designated operational entity documentation on the analysis of the environmental impacts of the project activity, including transboundary impacts and, if those impacts are considered significant by the project participants or the host Party, have undertaken an environmental impact assessment in accordance with procedures as required by the host Party;	Covered in table 6
Comments by local stakeholders	Comments by local stakeholders have been invited, a summary of the comments received has been provided, and a report to the designated operational entity on how due account was taken of any comments has been received;	Covered in Table 7
Other requirements	The project activity conforms to all other requirements for CDM project activities in relevant decisions by the COP/MOP and the Executive Board.	Covered in Table 8

SMALL SALE PROJECTS AND AR PROJECTS HAVE SPECIFIC REQUIREMENTS WHICH ARE COVERED IN TABLE 9-11. SMALL SCALE SSC PROJECTS HAVE SPECIAL REQUIREMENTS WHICH MIGHT DEVIATE FROM THE REQUIREMENTS OF OTHER CDM PROJECTS. THESE REQUIREMENTS ARE TESTED IN TABLE 9. PLEASE NOTE THAT SOME QUESTIONS IN TABLE 9 OVERLAP WITH QUESTIONS IN THE OTHER TABLES. WHERE THE QUESTIONS IN TABLE 9 CONTRADICT OR OVERLAP QUESTIONS ELSEWHERE IN THE CHECKLIST, THE QUESTIONS IN TABLE 9 SHALL PREVAIL. FOR THE VALIDATION OF SMALL SCALE PROJECTS, ASSESSOR IS REQUIRED TO ADDRESS THE QUESTIONS IN TABLE 9 FIRST BEFORE STARTING WITH THE QUESTIONS IN THE OTHER TABLES.

FURTHER REMARKS ON THE USE OF THIS DOCUMENT:

- text in *italic blue* is meant as guidance for the assessor
- MoV = Means of Verification, DR= Document Review, I= Interview

This protocol should be adapted as required. For example, if the project is not a small scale project or an AR project, some tables can be deleted.

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	PDD	No Annex I country in this project.	Ok	Ok
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	PDD	No Letter of Approval by host country (Brazil) has been submitted to the validator. The letter will be issued by the DNA after they analyse the validation report.	Send the validation report to DNA	
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	UNFCCC web site	Yes, Brazil: 23 August 2002.	Ok	Ok
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	DR	PDD ACM 0001	Yes, The current practice at João Pessoa landfill is to allow the uncontrolled release of LFG into the atmosphere. The	Ok	Ok

REQUIREMENT	MoV	Ref	Comment	Draft finding	Concl
the baseline scenario			collection and destruction of the methane in the project activity will reduce GHG emissions. ACM0001 is correctly applied.		
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	UNFCCC web site	PDD publicly available: 05/12/06 until 03/01/2007. http://cdm.unfccc.int/Projects/Validation/DB/YP9Z7NZBWJ4ONRZSDT9KWWGMHIB24I/view.html No comments were received.	Ok	Ok
1.6 The project has correctly completed a Project Design Document, using the current version and exactly following the guidance	DR	PDD	Yes. The project used the current version.	Ok	Ok
1.7 The project shall not make use of Official Development Assistance (ODA), nor result in the diversion of such ODA	DR	PDD	No ODA has been provided for this project.	Ok	Ok
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		
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		
1.10 Is the current version of the PDD complete and does it clearly reflect all the information presented during the validation assessment.	DR	PDD	The current version is used.	Ok	Ok
1.11 Does the PDD use accurate and reliable information that can be verified in an objective manner?	DR	PDD	All information in the PDD was verified.	Ok	Ok

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			ACM 0001 is applicable to landfill gas capture project activities, where the baseline scenario is the partial or total atmospheric release of the gas and the project activities include the situation where the captured gas is flared. A new version of the methodology ACM0001 is available at the UNFCCC website. To present up dated version of the PDD considering the new ACM0001 version 05. To review section B.1 of the PDD (date and version). CAR 1 was raised. PDD was revised according methodology ACM0001 version5. CAR 1 was close out.	CAR 1	Ok
2.2 Is the project boundary consistent with the approved methodology	PDD ACM 0001	DR	Yes. The project boundary is the site (João Pessoa landfill) of the project activity where the gas is captured and destroyed. It is consistent with ACM 0001.	Ok	Ok
2.3 Are the baseline emissions determined in accordance with the methodology described	PDD ACM 0001	DR	Yes. ACM 0001 defines that project proponents should provide an ex-ante estimate of emissions reductions, by projecting the future GHG emissions of the landfill using verifiable methods. The total methane emissions in the absence of the project activity are estimated based on the	Ok	Ok

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			waste tonnage of the landfill using a United States Environmental Protection Agency (USEPA) first-order kinetic model for landfill gas.		
2.4 Are the project emissions determined in accordance with the methodology described	PDD ACM 0001	DR	Yes. As described in the PDD, the landfill gas not captured by the landfill gas collection and flaring system cannot be monitored, as this emission is diffused over the landfill. The amount of landfill gas collected and destroyed by combustion can be monitored using a flow meter. Project emissions are thus comprised of the quantity of methane collected and not flared due to flaring inefficiency, and this amount is subtracted from the measured amount of collected methane (expected efficiency is upwards of 90%). In addition, ACM0001 defines that possible CO2 emissions should be accounted as project emissions. The electricity required for the operation of the project activity should be accounted and monitored. Project proponents should account for CO2 emissions by multiplying the quantity of electricity required with the CO2 emissions intensity of the electricity displaced (CEFelectricity,y). It was estimated in João Pessoa project (PDD, page 19, section B.6.4	Ok	Ok

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			"Estimation of project activity emission (tonnes of CO_2e)".		
2.5 Is the leakage op the project activity determined in accordance with the methodology described	PDD ACM 0001	DR	No leakage effects need to be accounted.	Ok	Ok
2.6 Are the emission reductions determined in accordance with the methodology described	PDD ACM 0001	DR	Yes. ACM 0001 defines that the emission reduction achieved by the project activity during a given year "y" (ERy) is the difference between the amount of methane actually destroyed during the year (MDproject,y) and the amount of methane that would have been destroyed during the year in the absence of the project activity (MDreg,y) times the approved Global Warming Potential value for methane (GWPCH4). Electricity and thermal energy emission reductions do not apply to the project João Pessoa. The "Adjustment Factor" of 10% was estimated of the total methane produced that is flared due to odour and security. CO2 emissions resulting from electricity consumption was accounted and deducted from the emission reductions.	Ok	Ok

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	PDD ACM	DR	ACM0001 methodology requires the use of the "Tool for the demonstration and	NIR 2 CAR 4	

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			assessment of additionality". The project follow the "Tool": Step 0 is not applicable because the crediting period of the project activity will start (expected in October 2007) after the registration. The "Tool" sub-step 1a require to define alternatives scenarios available to the project participants or similar project developers that provide outputs or services comparable with the CDM project activity. The Sub-step 1a in the PDD did not define alternatives to the project activity. NIR 2 was raised. The "Tool" has options to define alternatives for the project. The project activity defined the continuation of the current situation as the only alternative for the project activity. There is no legal requirement that obligates the landfill to destroy the methane. NIR 2 was closed out. Step 2: The destruction of methane via the project activity would not result in income other than that derived through CERs. The project is not financially attractive, only through registration as a CDM project. Verified that the implementation of the project require investment. The financial		

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			analysis estimated a similar project cost. It was no presented data that to evidence the investment in equipments, labours, managements, others). Step 4: It was verified that LFG recovery is not practiced in Brazil, except in those under CDM. There is not legal requirement for the collection and combustion of landfill gas. The sub-step 4b discuss similar activities are been carried out. According to the "Tool" other CDM projects activities can not be included in this analysis. CAR 4 was raised. The LFG recovery is not practiced in Brazil, except in those under CDM. There is no legal requirement for the collection and combustion of the landfill gas. CAR 4 was closed out. Step 5: the CDM registration will facilitate and allow the implementation of the proposed project activity and ensure its financial viability.		
3.2 Is the discussion on the additionality clear and have all assumptions been supported by transparent and documented evidence	PDD ACM	DR	Yes, see above. Step 2, Investment analysis: according to the PDD the only economic benefits is the CDM income, so the option I is applicable. The sub-step 2b presents the costs to implement the project activity. To present the investment worksheet	CAR 3	Ok

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			and related documents. CAR 3 was raised. The destruction of methane via the project activity would not result in income other than that derived through CERs. The project is not financially attractive, only through registration as a CDM project. The implementation of the project requires investment. The financial analysis presented is estimated because the project will be implemented only in the end of 2007. CAR 3 was closed out. The issue related to legal requirements was verified by the local assessor. It was confirmed that there is no requirement for collection and flare of LFG in João Pessoa landfill. It was confirmed that it is not a business as usual (there are other landfill gas project in Brazil registered under CDM).		
3.3 Does the selected baseline represent the most likely scenario among other possible and/or discussed scenarios?	PDD ACM	DR	Yes from doc review. See above.	Ok	Ok
3.4 Is it demonstrated/justified that the project activity itself is not a likely baseline scenario	PDD ACM	DR	Yes from doc review. See above.	Ok	Ok

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	PDD	DR	Yes. ACM 0001 is applicable to landfill gas	Ok	Ok

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
methodology	ACM 0001		capture project activities, where the baseline scenario is the partial or total atmospheric release of the gas and the project activities include situations where the captured gas is flared (the case of João Pessoa project).		
4.2 Does the PDD provide for the monitoring of the baseline emissions as required in the monitoring methodology	PDD ACM 0001	DR	No monitoring of baseline emissions is required; monitoring methodology is based on the direct measurement of the quantity of LFG captured, collected and destroyed by the LFG management system.	Ok	Ok
4.3 Does the PDD provide for the monitoring of the project emissions as required in the monitoring methodology	PDD ACM 0001	DR	Some items are not according methodology ACM0001: - Data unit of the Landfill gas temperature; - Data unit of the Landfill gas pressure; There are no items 1 and 5 of the methodology. CAR 6 was raised. The requested information was included in the PDD version 2 (landfill gas temperature and pressure, item 5 – temperature of the flare and item 1 is not applicable). CAR 6 was closed out.	CAR 6	
4.4 Does the PDD provide for the monitoring of the leakage as required in the monitoring methodology	PDD ACM 0001	DR	No leakage needs to be accounted. CO2 emissions resulting from electricity consumption was accounted and deducted from the emission reductions (see also item 2.5 of this checklist).	Ok	Ok

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
4.5 Does the PDD provide for Quality Control (QC) and Quality Assurance (QA) Procedures as required in the monitoring methodology	PDD ACM 0001	DR	Yes.	Ok	Ok

Table 5Monitoring plan (PDD Annex 4)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
5.1 Monitoring of Sustainable Development Indicators/ Environmental Impacts	PDD	DR	The development indicators/ environmental impacts include monitoring of sustainable development indicators and environmental impacts: Job creation, Income generation, impact of odour on neighbours, Subsurface migration of landfill gas, Landfill safety, and Technology transfer.	Ok	Ok
5.1.1 Does the monitoring plan provide the collection and archiving of relevant data concerning environmental, social and economic impacts?	PDD	DR	Yes. See above.	Ok	Ok
5.1.2 Is the choice of indicators for sustainability development (social, environmental, economic) reasonable?	PDD	DR	Yes. See above.	Ok	Ok
5.1.3 Will it be possible to monitor the specified sustainable development indicators?	PDD	DR	Yes. See above.	Ok	Ok
5.1.4 Are the sustainable development indicators in line with stated national priorities in the Host Country?			PROBIOGAS – JP has environmental license for landfill (Ref. 4), however does not have any environmental license for the project because has not been implemented. Rumos will be waiting for the project's registration in order to start licensing	Ok	Ok

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			process and it will have to attend the legal requirements.		
5.2 Project Management Planning					
5.2.1 Is the authority and responsibility of project management clearly described?	PDD	DR	There is no authority and responsibility defined yet. The project has not been implemented. After registration authority and responsibility will be described and available to the Verification Team.	Ok	Ok
5.2.2 Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	PDD	DR	See item 5.2.1.	Ok	Ok
5.2.3 Are procedures identified for training of monitoring personnel?	PDD	DR	The project has not been implemented yet. There are no procedures. After registration all procedures will be described and available to the Verification Team. Observation 1: Regarding project management and procedures: Specific procedure needs to be available before project operation and during verification assessment (procedures for measurements, reporting, monitoring data adjustments, review of reported data/ results, internal audit, review data before verification assessment, corrective action).	Ok	Observation 1
5.2.4 Are procedures identified for emergency preparedness for cases where emergencies can cause unintended emissions?	PDD	DR	See item 5.2.3.	Ok	Observation 1

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
5.2.5 Are procedures identified for calibration of monitoring equipment?	PDD	DR	See item 5.2.3.	Ok	Observation 1
5.2.6 Are procedures identified for maintenance of monitoring equipment and installations?	PDD	DR	See item 5.2.3.	Ok	Observation 1
5.2.7 Are procedures identified for monitoring, measurements and reporting?	PDD	DR	See item 5.2.3.	Ok	Observation 1
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)	PDD	DR	See item 5.2.3.	Ok	Observation 1
5.2.9 Are procedures identified for dealing with possible monitoring data adjustments and uncertainties?	PDD	DR	See item 5.2.3.	Ok	Observation 1
5.2.10 Are procedures identified for review of reported results/data?	PDD	DR	See item 5.2.3.	Ok	Observation 1
5.2.11 Are procedures identified for internal audits of GHG project compliance with operational requirements where applicable?	PDD	DR	See item 5.2.3.	Ok	Observation 1
5.2.12 Are procedures identified for project performance reviews before data is submitted for verification, internally or externally?	PDD	DR	See item 5.2.3. There is a consultant contracted for review data before verification.	Ok	Observation 1
5.2.13 Are procedures identified for corrective actions in order to provide for more accurate future monitoring and reporting?	PDD	DR	See item 5.2.3.	Ok	Observation 1

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	PDD	DR	Yes. There are expected	Ok	Ok

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
sufficiently described?			no significant environmental impacts due to the project activity.		
6.2 Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	PDD	DR	There are no requirements for an environmental impact assessment for the project activity; an EIA was made for the landfill. There are expected no significant environmental impacts due to the project activity	Ok	Ok
6.3 Will the project create any adverse environmental effects?	PDD	DR	No adverse impact was identified.	Ok	Ok
6.4 Are transboundary environmental impacts considered in the analysis?	PDD	DR	No significant environmental impacts expected.	Ok	Ok
6.5 Have identified environmental impacts been addressed in the project design?	PDD	DR	No significant environmental impacts detected.	Ok	Ok
6.6 Does the project comply with environmental legislation in the host country?	PDD	DR	Yes. Verified Operation license of the Landfill. The license for the project activity has not been issued yet. Observation 2: The project activity will request the license for the landfill gas system. The applicable license needs to be available for the verification assessment and the project needs to comply with all environmental requirements according to the license that will be issued by State Environmental Agency.	Ok	Observation 2

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	PDD	DR	Yes. The letters were sent	Ok	Ok

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
consulted?			for: Municipal Administration of João Pessoa (sent in 03/10/2006); Municipal Legislation Chamber of João Pessoa (sent in 02/10/2006) ; State Prosecutor's Office (02/10/2006); Brazilian NGO Forum (02/10/2006); SUDEMA – Superintendência de Administração do Meio Ambiente (02/10/2006); Environmental Secretary of State (03/10/2006); Rotary Club of João Pessoa (confirmed through interview). No comments received.		
7.2 Have appropriate media been used to invite comments by local stakeholders?	PDD	DR	Yes. The letters were sent in local language.	Ok	Ok
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?	PDD	DR	Yes, letters were sent to local stakeholder according "Resolution #1 (2003/09/11) Brazil".	Ok	OK
7.4 Is a summary of the stakeholder comments received provided?	PDD	DR	Yes, no comments received.	Ok	Ok
7.5 Has due account been taken of any stakeholder comments received?	PDD	DR	Yes, no comments received.	Ok	Ok

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	PDD	DR	Yes, no changes have	Ok	Ok

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
the document been completed without modifying/adding headings or logo, format or font.			been observed.		
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	PDD	DR	The PDD mention about item E.4 and D2.4, however these items are not in the template of the PDD version 03.1. CAR 5 was raised. Corrections made in the PDD version2. CAR 5 was closed out.	CAR 5	Ok
8.2 Technology to be employed					
8.2.1 Does the project design engineering reflect current good practices?	PDD	DR	Yes. There are other CDM projects using similar technology.	Ok	Ok
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?	PDD	DR	To combust the LFG, an enclosed flare with full process controls and instrumentation will also be constructed and operated.	Ok	Ok
8.2.3 Is the project technology likely to be substituted by other or more efficient technologies within the project period?	PDD	DR	It is expected not.	Ok	Ok
8.2.4 Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?	PDD	DR	The project will need engineers and others specialists with experience to implement the project. These professional will also train local operators and engineers on operations, record-keeping, equipment calibration, overall maintenance, and procedures for corrective action.	Ok	Ok
8.3 Duration of the Project/ Crediting Period					
8.3.1 Are the project's starting date and operational lifetime clearly defined and reasonable?	PDD	DR	Section C.1.1 – starting date 1 October 2007. Section C.1.2 – lifetime 21	Ok	Ok

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			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)?	PDD	DR	Yes, renewable crediting period.	Ok	Ok
8.3.3 Does the project's operational lifetime exceed the crediting period	PDD	DR	No.	Ok	Ok

TABLE 9 ADDITIONAL REQUIREMENTS FOR SSC PROJECTS - NA

TABLE 10 ADDITIONAL REQUIREMENTS FOR AR PROJECTS - NA

TABLE 11 ADDITIONAL REQUIREMENTS FOR SSC AR PROJECTS – NA

TABLE 12 ADDITIONAL INFORMATION TO BE VERIFIED BY LOCAL ASSESSORS / SITE VISIT

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
Verify plant of the landfill and project.	Visit	DR Site visit	Verified aerial photo and photos of the site were provided.	Ok	Ok
Confirm that there are no current regulation requiring removal of methane for safety considerations	Visit	DR	Verified that there no legal requirement and the environmental agency does not require any burning of methane for safety purposes. Operation license, Nº. 0329 valid till 10/03/2007, issued by SUDEMA (Superintendência de Administração do Meio Ambiente). This information was verified in the landfill license. The license for the project activity will be requested before project implementation.	Ok	Ok

Annex 3 - FINDINGS OVERVIEW - CDM.Val 0817

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: 11/01/2007 Raised by: Geisa Principe

No.	Type	Issue	Ref
1	CAR	A new version of the methodology ACM0001 is available at the UNFCCC website. To present up dated version of the PDD considering the new ACM0001 version 05. To review section B.1 of the PDD (date and version).	2.1
29/01/2007: The PDD v2 was updated, applying ACM0001 – version 5 and ACM0002 – version 6 [Comments]			
Date: 03-02-2007 – Fabian Gonçalves. [Acceptance and close out] PDD was revised according methodology ACM0001 version 5 and ACM0002 version 6. CAR 1 was close out.			

Date: 11/01/2007 Raised by: Geisa Principe

No.	Type	Issue	Ref
2	NIR	The “Tool” sub-step 1a require to define alternatives scenarios available to the project participants or similar project developers that provide outputs or services comparable with the CDM project activity. The Sub-step 1a in the PDD did not define alternatives to the project activity.	3.1
29/01/2007: The PDD v2 was updated on page 12, explaining that the only alternative to the project activity was to continue with the landfill operation (BAU scenario). [Comments]			
Date: 03-02-2007 – Fabian Gonçalves. [Acceptance and close out] The “Tool” has options to define alternatives for the project. The project activity defined the continuation of the current situation as the only alternative for the project activity. There is no legal requirement that obligates the landfill to destroy the methane. NIR 2 was closed out.			

Date: 11/01/2007 Raised by: Geisa Principe

No.	Type	Issue	Ref
3	CAR	Step 2, Investment analysis: according to the PDD the only economic benefits is the CDM income, so the option I is applicable. The sub-step 2b presents the costs to implement the project activity. To present the investment worksheet and related documents.	3.2
29/01/2007: A table with the financial analysis was added to the PDD v2 on page 13. The table clearly presents the costs of the equipment. [Comments]			
Date:03-02-2007 – Fabian Gonçalves. [Acceptance and close out] The destruction of methane via the project activity would not result in income other than that derived through CERs. The project is not financially attractive, only through registration as a CDM project. The implementation of the project requires investment. The financial analysis presented is estimated because the project will be implemented only in the end of 2007. CAR 3 was closed out.			

Date: 11/01/2007 Raised by: Geisa Principe

No.	Type	Issue	Ref
4	CAR	The sub-step 4b discuss similar activities are been carried out. According to the "Tool" other CDM projects activities can not be included in this analysis.	3.1
29/01/2007: PDD v2 was updated on page 13, explaining that there are no similar projects in Brazil without considering CERs revenues. [Comments]			
Date: 03-02-2007 – Fabian Gonçalves. [Acceptance and close out] The LFG recovery is not practiced in Brazil, except in those under CDM. There is not legal requirement for the collection and combustion of the landfill gas. CAR 4 was closed out.			

Date: 11/01/2007 Raised by: Geisa Principe

No.	Type	Issue	Ref
5	CAR	The PDD mention about item E.4 and D2.4, however these items are not in the template of the PDD version 03.1.	8.1.2
29/01/2007: the PDD v2 was updated and the items mentioned were excluded. [Comments]			
Date: 03-02-2007 - Fabian Gonçalves. [Acceptance and close out] Corrections made in the PDD version2. CAR 5 was closed out.			

Date: 11/01/2007 Raised by: Geisa Principe

No.	Type	Issue	Ref
6	CAR	Some items are not according methodology ACM0001: - Data unit of the Landfill gas temperature; - Data unit of the Landfill gas pressure; There are not items 1 and 5 of the methodology.	4.3
29/01/2007: According with ACM0001 – version 5, when the flow-meter installed automatically converts the measured flow to normalized flow there is no need to measure temperature and pressure. As the PROBIOGÁS-JP will apply the state-of-the-art technology, a flow-meter with automatic conversion to normalized flow will be installed. [Comments]			
Date: 02-02-2007 – Fabian Gonçalves.			

[Acceptance and close out] The requested information was included in the PDD version 2 (landfill gas temperature and pressure, item 5 – temperature of the flare and item 1 is not applicable). CAR 6 was closed out.

Observations:

1 - Regarding project management and procedures: Specific procedure needs to be available before project operation and during verification assessment (procedures for measurements, reporting, monitoring data adjustments, review of reported data/ results, internal audit, review data before verification assessment, corrective action).

2 – It was verified the landfill environmental license. The project activity will request the license for the landfill gas system. The applicable license needs to be available for the verification assessment and the project needs to comply with all environmental requirements according to the license that will be issued by State Environmental Agency.

Annex 4: Statements of Competency

Statement of Competence

Name:Fabian Goncalves SGS Affiliate:SGS Brazil

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: 27/07/2006

Statement of Competence

Name:Geisa Principe SGS Affiliate:SGS Brazil

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 Marco van der Linden Date: 13/03/2007

Statement of Competence

Name:Irma Lubrecht SGS Affiliate:Netherlands

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 ☐
27. Chemical Industry ☐
28. Construction ☐
29. Transport ☐
30. Mining/Mineral Production ☐
31. Metal Production ☐
32. Fugitive Emissions from Fuels (solid,oil and gas) ☐
33. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride ☐
34. Solvent Use ☐
35. Waste Handling and Disposal ☒
36. Afforestation and Reforestation ☒
37. Agriculture ☐

Approved Member of Staff by Marc van der Linden Date: 16-03-2007