



Industrie Service

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Validation Report

ECOINVEST CARBON BRASIL LTDA.

VALIDATION OF THE CDM-PROJECT:
SANTECH – Saneamento & Tecnologia Ambiental Ltda. – SANTEC Resíduos landfill gas emission reduction Project Activity.

REPORT NO. 857948 - REPEAT

2008, May 26

TÜV SÜD Industrie Service GmbH
Carbon Management Service
Westendstr. 199 - 80686 Munich – GERMANY

Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
857948 - Repeat	24.11.2006	4	2008-05-26	-

Subject: Validation of a CDM Project	
Accredited TÜV SÜD Unit: TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 - 80686 Munich Federal Republic of Germany	TÜV SÜD Contract Partner: TÜV SÜD DO BRASIL – SERVIÇOS TÉCNICOS PARA A INDÚSTRIA E O MEIO AMBIENTE LTDA. Rua Henrique Monteiro n.90, 10.º andar ZIP 05423-020 - São Paulo Brazil
Client: Santech - Saneamento & Tecnologia Ambiental Ltda. Rua Afonso Brás , 900/conj.71 - Vila Nova Conceição São Paulo, CEP 04511-001 Brazil	Project Site(s): BR-101, km 389 City of Içara Santa Catarina GPS coordinates (corner points limiting the geo- graphical area of the project activity): 49d19'40.6"W, 28d47'21.4"S 49d19'54.5"W, 28d47'29.7"S 49d19'47.6"W, 28d47'41.0"S 49d19'35.9"W, 28d47'29.5"S
Project Title: SANTECH – Saneamento & Tecnologia Ambiental Ltda. – SANTEC Resíduos landfill gas emission reduction Project Activity.	
Applied Methodology / Version: ACM0001, version 6	Scope(s): 1
First PDD Version: Date of issuance: 2006-07-26 Version No.: 1 Starting Date of GSP 2007-09- 01	Final PDD version: Date of issuance: 2008-05-23 Version No.: 23
Estimated Annual Emission Reduction: 39,478 tCO ₂ e	
Assessment Team Leader: Johann Thaler (TÜV SÜD DO BRASIL)	Further Assessment Team Members: Markus Knoedlseder (TÜV SÜD Industrie Service GmbH)
Summary of the Validation Opinion: <p><input checked="" type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board in case letters of approval of all Parties involved will be available before the expiring date of the applied methodology(ies) or the applied methodology version respectively.</p> <p><input type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the project for registration by the CDM Executive Board and will inform the project participants and the CDM Executive Board on this decision.</p>	

Abbreviations

ACM	Approved Consolidated Methodology
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CR	Clarification Request
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
Ecoinvest	Ecoinvest Carbon Brasil Ltda.
EIA / EA	Environmental Impact Assessment / Environmental Assessment
ER	Emission reduction
GHG	Greenhouse gas(es)
IRR	Internal Rate of Return
KP	Kyoto Protocol
LFG	Landfill Gas
MP	Monitoring Plan
NGO	Non Governmental Organisation
ONS	National Dispatch Center (Operador Nacional do Sistema Elétrico)
PDD	Project Design Document
PP	Project Participant
Santech Ltda.	Santech - Saneamento & Tecnologia Ambiental Ltda.
TÜV SÜD	TÜV SÜD Industrie Service GmbH
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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1 INTRODUCTION

1.1 Objective

The validation objective is an independent assessment by a Third Party (Designated Operational Entity = DOE) of a proposed project activity against all defined criteria set for the registration under the Clean Development Mechanism (CDM). Validation is part of the CDM project cycle and will finally result in a conclusion by the executing DOE whether a project activity is valid and should be submitted for registration to the CDM-EB. The ultimate decision on the registration of a proposed project activity rests at the CDM Executive Board and the Parties involved.

The project activity discussed by this validation report has been submitted under the project title:
SANTECH – Saneamento & Tecnologia Ambiental Ltda. – SANTEC Resíduos landfill gas emission reduction Project Activity.

1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of CDM project activities the scope is set by:

- Ø The Kyoto Protocol, in particular § 12
- Ø Decision 2/CMP1 and Decision 3/CMP.1 (Marrakech Accords)
- Ø Further COP/MOP decisions with reference to the CDM (e.g. decisions 4 – 8/CMP.1)
- Ø Decisions by the EB published under <http://cdm.unfccc.int>
- Ø Specific guidance by the EB published under <http://cdm.unfccc.int>
- Ø Guidelines for Completing the Project Design Document (CDM-PDD), and the Proposed New Baseline and Monitoring Methodology (CDM-NM)
- Ø The applied approved methodology
- Ø The technical environment of the project (technical scope)
- Ø Internal and national standards on monitoring and QA/QC
- Ø Technical guideline and information on best practice

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.

Once TÜV SÜD receives a first PDD version, it is made publicly available on the internet at TÜV SÜD's webpage as well as on the UNFCCC CDM-webpages for starting a 30 day global stakeholder consultation process (GSP). In case of any request a PDD might be revised (under certain conditions the GSP will be repeated) and the final PDD will form the basis for the final evaluation as presented by this report. Information on the first and on the final PDD version is presented at page 1.

The only purpose of a validation is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD 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.

2 METHODOLOGY

The project assessment aims at being a risk based approach and is based on the methodology developed in the Validation and Verification Manual, an initiative of Designated and Applicant Entities, which aims to harmonize the approach and quality of all such assessments.

In order to ensure transparency, a validation protocol was customised for the project. TÜV SÜD developed a “cook-book” for methodology-specific checklists and protocol based on the templates presented by the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), the discussion of each criterion by the assessment team 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.

The validation protocol consists of three tables. The different columns in these tables are described in the figure below.

The completed validation protocol is enclosed in Annex 1 to this report.

Validation Protocol Table 1: Conformity of Project Activity and PDD				
Checklist Topic / Question	Reference	Comments	PDD in GSP	Final PDD
The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then further subdivided. The lowest level constitutes a checklist question / criterion.	Gives reference to documents where the answer to the checklist question or item is found in case the comment refers to documents other than the PDD.	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. In some cases sub-checklist are applied indicating yes/no decisions on the compliance with the stated criterion. Any Request has to be substantiated within this column	Conclusions are presented based on the assessment of the first PDD version. This is either acceptable based on evidence provided (p), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CR) is used when the validation team has identified a need for further clarification.	Conclusions are presented in the same manner based on the assessment of the final PDD version.



Validation Protocol Table 2: Resolution of Corrective Action and Clarification Requests			
Clarifications and corrective action requests	Ref. to table 1	Summary of project owner response	Validation team conclusion
<i>If the conclusions from table 1 are either a Corrective Action Request or a Clarification Request, these should be listed in this section.</i>	<i>Reference to the checklist question number in Table 1 where the Corrective Action Request or Clarification Request is explained.</i>	<i>The responses given by the client or other project participants during the communications with the validation team should be summarised in this section.</i>	<i>This section should summarise the validation team's responses and final conclusions. The conclusions should also be included in Table 1, under "Final PDD".</i>

In case of a denial of the project activity more detailed information on this decision will be presented in table 3.

Validation Protocol Table 3: Unresolved Corrective Action and Clarification Requests		
Clarifications and corrective action requests	Id. of CAR/CR 1	Explanation of the Conclusion for Denial
<i>If the final conclusions from table 2 results in a denial the referenced request should be listed in this section.</i>	<i>Identifier of the Request.</i>	<i>This section should present a detail explanation, why the project is finally considered not to be in compliance with a criterion.</i>

2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body “climate and energy”. The composition of an assessment team has to be approved by the Certification Body ensuring that the required skills are covered by the team. The Certification Body TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:

- Ø Assessment Team Leader (ATL)
- Ø Greenhouse Gas Auditor (GHG-A)
- Ø Greenhouse Gas Auditor Trainee (T)
- Ø Experts (E)

It is required that the sectoral scope linked to the methodology has to be covered by the assessment team.

The validation team was consisting of the following experts (the responsible Assessment Team Leader is written in bold letters):

Name	Qualification	Coverage of technical scope	Coverage of sectoral expertise	Host country experience
Johann Thaler	ATL	p	p	p
Markus Knoedlseder	GHG-A	p	p	p

Johann Thaler graduated as Master of environmental Economy at the University of Augsburg. During his study he got first experiences in environmental management systems. His master thesis was about a fuel switch program in Brazil as a CDM project. Based in Brazil he has been working for TÜV SÜD as a GHG auditor on freelance basis since March 2005. He attended and successfully finished a ISO 14001 Environmental Management Internal Auditing Training

Markus Knoedlseder was an auditor for climate change projects and GHG emission inventories at the department “Carbon Management Service” in the head office of TÜV SÜD Industrie Service GmbH, Munich until December 31, 2007. He has been involved in the topic of environmental auditing, baselining, monitoring and verification due to the requirements of the Kyoto Protocol since Oct. 2001. His main focus lies on renewable energies. During his time with TÜV SÜD he was involved in the given project activity.

2.2 Review of Documents

The first PDD version submitted by the client and additional background documents related to the project design and baseline were reviewed as initial step of the validation process. A complete list of all documents and proofs reviewed is attached as annex 2 to this report.

2.3 Follow-up Interviews

On August 17/18, 2006 TÜV SÜD performed an interview on-site with project participants to confirm selected information and to resolve issues identified in the first document review. The table below provides a list of all persons interviewed in the context of the on-site visit.

Name	Organisation
William Wagner de Lima	Director, Santech Ltda.
Altair Jose Vieira	Operational manager, Santech Ltda.
Ionice Maria Vefago	Coordinator for environmental education, Santech Ltda.
Edi Fabio da Silva	Commercial manager, Santech Ltda
Fabio Joao da Silva	Environmental consultant, Ecoeficiencia
Francisco do Espirito Santo Filho	Ecoinvest

2.4 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to resolve the requests for corrective actions and clarifications and any other outstanding issues which needed to be clarified for TÜV SÜD's positive conclusion on the project design. The Corrective Action Requests and Clarification Requests raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the validation process, the concerns raised and responses that have been given are summarised in chapter 3 below and documented in more detail in the validation protocol in annex 1.

2.5 Internal Quality Control

As final step of a validation the validation report and the protocol have to undergo an internal quality control procedure by the Certification Body "climate and energy", i.e. each report has to be approved either by the head of the certification body or his deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one.

It rests at the decision of TÜV SÜD's Certification Body whether a project will be submitted for requesting registration by the EB or not.

3 SUMMARY OF FINDINGS

As informed above all findings are summarized in table 2 of the attached validation protocol.

History of the validation process

The audit team has been provided with a draft PDD in July 2006. Based on this documentation a document review and a fact finding mission in form of an on-site audit have taken place. Afterwards the client decided to revise the PDD according to the CARs and CRs indicated in the audit process. The project received the approval under restrictions by the Brazilian DNA on April 13, 2007, however it was not possible to submit the PDD (applying version 4 of ACM0001) anymore for registration, as the methodology was revised in the meantime and the deadline of version 4 has been expired. A new GSP process was started on September 01, 2007 applying version 6 of ACM0001. In the beginning it was pretended to include an autoclave in the proposed project activity, however finally project participants decided to exclude it again.

The final PDD version 23 submitted in May 2008 serves as the basis for the assessment presented herewith. Changes are not considered to be significant with respect to the qualification of the project as a CDM project based on the two main objectives of the CDM to achieve a reduction of anthropogenic GHG emissions by sources and to contribute to sustainable development.

Project description

SANTECH – Saneamento & Tecnologia Ambiental Ltda. is a waste management company founded in 2005. It was created to develop new technologies in the complete process of waste management, from pick-up to final disposal at sites strategically designed for waste treatment. Santec Resíduos, belonging to the company and site of the landfill, is located in Içara, state of Santa Catarina, south region of Brazil. The landfill receives 240 tonnes of deposit waste each day (80 % of domestic and 20 % industrial waste) and prediction until the provisioned closing date in 2025 is 2 million tonnes approximately. There is a passive venting system for biogas installed since the day it started to operate in September 2005.

The project activity involves the installation of methane collection and destruction equipment, which increases the LFG destruction efficiency from around 9 % before to about 57 % afterwards. This equipment will consist of pipes connected to the drainage wells leading to an enclosed flare, which is capable of performing the almost complete burn and destruction of the methane. The proposed project activity reduces GHG emissions by avoiding the former release of methane into the atmosphere.

Findings

In total the assessment team expressed 13 Clarification Requests and 65 Corrective Action Requests.

Many of the CARs were related to the pretended inclusion of an autoclave, which in the end however was excluded from the proposed project activity again.

Other key findings during the validation process were related to the provision of information which was missing or not updated, inconsistencies in the information within the PDD and between the PDD and other CDM related documents, the common practice analysis and the “Tool to determine project emissions from flaring gases containing methane”. Besides, parameters were missing or not complete.

Considering these findings the PDD version 1 has been revised and the actual PDD version 23 is in compliance with the CDM requirements.

Baseline

The project is based on the approved methodology: ACM0001, version 6, “Consolidated baseline methodology for landfill gas project activities”. The respective baseline methodology is deemed to be the most applicable one for this project. The PDD responds convincingly to each of the applicability criteria which are outlined in the baseline methodology.

Baseline emissions are determined using reliable assumptions. The parameter “landfill gas being sent to the flare” as one of the decisive parameters for the quantitative prognosis is estimated by using the US EPA First Order Decay Model, using L_0 (methane generation potential) and k (methane generation rate constant) values appropriate for Brazil. The landfill does neither generate electricity nor heat, thus all LFG is sent to flares.

The quantity of methane destroyed by flaring is calculated by multiplying the landfill gas sent to flares by the average methane fraction of the landfill gas and by the methane density. Project emissions from flaring of the residual gas stream are discounted.

Project emissions from flaring are correctly calculated as per the “Tool to determine project emissions from flaring gases containing methane”. Regarding the flare efficiency, project participants decided to use the 90 % default value, as the proposed project activity will use an enclosed flare. Project emissions from electricity consumption are estimated in a sufficiently conservative way.

The methodology ACM0001, version 6 provides guidance on how to estimate the adjustment factor in the case if regulatory or contractual requirements are given. Even though neither regulatory nor contractual requirements exist for landfills in Brazil which oblige the combustion of methane, the proposed project activity applies the ratio of the destruction efficiency of the system in the baseline scenario to the destruction efficiency of the system used in the project activity as proposed as one example in the guidance in ACM0001, version 6. The calculation results in an adjustment factor of 16.1 %, however in order to be conservative, project participants decided to use an adjustment factor of 20 %. The adjustment factor in other registered CDM projects in Brazil is lower or the same as the 20 % applied in the proposed project activity. The calculation for the determination of the adjustment factor has been verified by the validation team and is correct.

The baseline scenario is the continuation of the current system, i.e. final disposal of solid waste using the practice of passive venting. LFG is released directly to the atmosphere instead of being captured and flared. There is no legal requirement nor any current planning for a legislation to capture and combust greenhouse gases produced by landfills in Brazil.

Additionality

The additionality of the project was checked carefully. In doing so the assessment team has put the main focus on the following issues.

The assessment team has reviewed the proof for the early consideration of the project. The consideration of CDM is evidenced by the contract between the CDM consultant Ecoinvest and Santech in June 2006. The date of this contract is considered as project’s starting date, as this contract is clearly dated before the purchase contracts of the main project equipment. The PDD, version 1 mentions as the project’s starting date the beginning of landfill operation on March 31, 2005. This date is not a correct definition of the project’s starting date in the opinion of the validation team, as it has directly nothing to do with the CDM project activity. Thus the validation team asked for an alteration of the project’s starting date to the date where the first real action of

the CDM project activity has taken place. This was the date of assignment of the contract by the CDM consultant Ecoinvest and Santec on June 06, 2006.

In step one of applying the tool for the demonstration and assessment of additionality (additionality tool) it is concluded that there exist alternatives to the proposed project activity, the additionality criteria is fulfilled.

Step two of the additionality tool, the investment analysis (simple cost analysis), describes in detail that the proposed project is not financially attractive without CER revenues. The proposed project activity does not generate any financial or economic benefit other than CDM related income as it only involves the collection and flaring of the LFG. The cost calculation is based on an estimative of the engineering and consulting company CEPOLLINA.

The barrier analysis (Step 3) of the additionality tool is not applied.

The common practice analysis (step 4) is based on the research “*Diagnóstico do Manejo de Resíduos Sólidos Urbanos*” elaborated by the Brazilian Ministry of the Cities in 2005 and published in August 2007. The landfill gas is used or flared in only 5.9% of units of final waste disposal sites. Discounting the CDM projects from the sample of this research, only 2,35% of the landfills use or flare the gas. This clearly demonstrates that using or flaring the landfill gas can not be considered the common practice in the country.

To conclude the additionality assessment it may be stated that the proposed project activity is without doubt additional.

The project boundary, the project’s starting date as well as the starting date of the crediting period are clearly defined in the last submitted PDD.

Monitoring

The final PDD includes all relevant parameters to be monitored in order to determine baseline and project emissions. Baseline emissions will be monitored as according to the requirements of the monitoring methodology ACM0001, version 6.

Project emissions from flaring of the residual gas stream are monitored as per the “Tool to determine project emissions from flaring gases containing methane” and emissions from imported electricity required to meet the project requirements are calculated by multiplying the total amount of electricity consumed by the ex-ante determined emissions factor. The emissions factor of 0.2826 tCO₂/MWh is based on ONS data from 2004-2006 and has been calculated by the most important project developers in Brazil. The EF calculation sheet was submitted to the validation team and no errors were detected when it was verified.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

TÜV SÜD published the project documents on UNFCCC website by installing a link to TÜV SÜD's own website and invited comments by Parties, stakeholders and non-governmental organisations during a period of 30 days.

The following table presents all key information on this process:

webpage: http://www.netinform.de/KE/Wegweiser/Ebene1_Projekte.aspx?Ebene1_ID=26&mode=0	
Starting date of the global stakeholder consultation process: 2006-08-15	
Comment submitted by: -	Issues raised: -
Response by TÜV SÜD: -	

webpage: http://www.netinform.de/KE/Wegweiser/Ebene1_Projekte.aspx?Ebene1_ID=26&mode=0	
Starting date of the global stakeholder consultation process: 2007-09-01	
Comment submitted by: -	Issues raised: -
Response by TÜV SÜD: -	

5 VALIDATION OPINION

TÜV SÜD has performed a validation of the following proposed CDM project activity:

SANTECH – Saneamento & Tecnologia Ambiental Ltda. – SANTEC Resíduos landfill gas emission reduction Project Activity.

The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board.

An analysis as provided by the applied methodology 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. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PDD version.

The validation is based on the information made available to us and the engagement conditions detailed in this 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, TÜV SÜD 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.

Munich, 2008-05-26



Certification Body “climate and energy”
TÜV SÜD Industrie Service GmbH

Fortaleza, 2008-05-26



Assessment Team Leader

Validation of the CDM Project:

SANTECH – Saneamento & Tecnologia Ambiental Ltda. – SANTEC
Resíduos landfill gas emission reduction Project Activity.



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Annex 1: Validation Protocol

Validation Protocol

Project Title: SANTECH – Saneamento & Tecnologia Ambiental Ltda. – SANTEC Resíduos landfill gas emission reduction

Project Activity.

Date of Completion: 26/05/2008

Number of Pages: 32

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Table 1a Conformity of Project Activity and PDD (First Global Stakeholder Consultation Process)
(Please recognize that no final PDD has been submitted in this context due to the repetition of the GSP when applying a new revision of the methodology)

REQUIREMENT	REFERENCE	Comment	CONCLUSION
1. The host country shall be a Party to the Kyoto Protocol	Marrakech Accords, CDM Modalities §30	Brazil has ratified the Kyoto Protocol on August 23, 2002.	
2. Parties participating in the CDM shall designate a national authority for the CDM	Marrakech Accords, CDM Modalities §29	Brazil as participating party has designated a national authority.	
3. The project shall assist non-Annex I Parties in achieving sustainable development and shall have obtained confirmation by the host country thereof.	Kyoto Protocol Art. 12.2, Marrakech Accords, CDM Modalities §40a	The project will assist Brazil in achieving a sustainable development. The issuance of the LoA will demonstrate that.	
4. The project shall have the written approval of voluntary participation from the designated national authorities of each party involved.	Kyoto Protocol Art. 12.5a, Marrakech Accords, CDM Modalities §40a	The confirmation by the host country has not been submitted to the validation team and the certification body "Climate and Energy". <i>Before submitting the project for registration the project owner has to provide an eligible Letter of Approval from involved Parties.</i>	
5. The project shall assist Parties included in Annex I in achieving compliance with part of their emission reduction commitment under Art. 3. A letter of approval for participants originating from Annex-I-Countries should be avail-	Kyoto Protocol Art.12.2	As the given project is a unilateral project, this issue is not relevant.	

Validation Protocol

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Table 1a Conformity of Project Activity and PDD (First Global Stakeholder Consultation Process)
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REQUIREMENT	REFERENCE	Comment	CONCLUSION
able.			
6. Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for minimum 30 days, and the project design document and comments have been made publicly available	Marrakech Accords, CDM Modalities, §40	The global stakeholder process has taken place from August 15 until September 13, 2006. There have been no comments received.	
7. The project design document shall be in conformance with the UNFCCC CDM-PDD format	Marrakech Accords, CDM Modalities, Appendix B, EB Decisions	The PDD is in conformance with the UNFCCC CDM-PDD format.	
8. The project participants shall submit a letter on the modalities of communication (MoC) before submitting a request for registration	EB-09 F_CDM_REG form	The letter on MoC will be submitted before submitting a request for registration. <i>Before submitting the project for registration the project owner has to provide an eligible Letter of Approval from involved Parties.</i>	

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Table 1a Conformity of Project Activity and PDD (First Global Stakeholder Consultation Process)**(Please recognize that no final PDD has been submitted in this context due to the repetition of the GSP when applying a new revision of the methodology)**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A. General Description of Project Activity					
A.1. Project Title					
A.1.1. Does the used project title clearly enable to identify the unique CDM activity?	1,2	DR,I	The project title is clearly enough to identify the unique CDM activity.	p	
A.1.2. Are there an indication of a revision number and the date of the revision?	2	DR	There has been indicated the number of the version in the PDD.	p	
A.1.3. Is this in consistency with the time line of the project's history?	1,2	DR, I	Not relevant.	p	
A.2. Description of the project activity					
A.2.1. Is the description delivering a transparent over-view of the project activities?	1,2	DR, I	The description is principally delivering a transparent overview of the project activity. <u>Corrective Action Request 1:</u> However, it is not mentioned in the description of the project activity that the project only consists of flaring of the captured gas and hence only claims CER credits for methane destruction, and not also for the	CAR 1	

Validation Protocol

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Table 1a Conformity of Project Activity and PDD (First Global Stakeholder Consultation Process)
(Please recognize that no final PDD has been submitted in this context due to the repetition of the GSP when applying a new revision of the methodology)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			generation of renewable energy. The project developer should add the information in the description of the project activity.		
A.2.2. Is all information provided in compliance with actual situation or planning?	1,2	DR,I	All information is provided in compliance with actual situation or planning.	p	
A.2.3. Are proofs available evidencing all information with relevance for the validity, for the determination of baseline and project emissions and for emission projections?	1,2	DR,I	See A.2.1.	CAR 1	
A.2.4. Is all information provided in consistency with details provided by further chapters of the PDD?	2	DR	Yes. All information provided is in consistency with details provided by further chapters of the PDD.	p	
A.3. Project Participants					
A.3.1. Is the form required for the indication of project participants correctly applied?	2	DR	The form for the indication of project participants is correctly applied.	p	
A.3.2. Is the voluntary participation of all listed entities or Parties confirmed by each of them?	1,2	DR,I	<u>Clarification Request 1:</u> Participants Declaration shall be signed by Ecoinvest Carbon and Santech before submitting to the Brazilian DNA.	CR 1	
A.3.3. Is all information provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	2	DR	Yes. All provided information is in consistency.	p	

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A.4. Technical description of the project activity					
A.4.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	1,2	DR, I	<u>Clarification Request 2:</u> It should be added the GPS information of the project site and indicated the exact address: Rodovia BR 101, km 389, Icara; Besides, the validation team requires using a more detailed map in the PDD.	CR 2	
A.4.2. Do the project participants possess ownership or licenses which will allow the implementation of the project at that site / those sites?	1,2,6 ,8	DR, I	Santech Ltda. has leased the site for indefinite time (i.e. until the project lifetime will have been finished), which will allow the implementation of the project.	p	
A.4.3. Is the category(ies) of the project activity correctly identified?	2	DR	The category is correctly identified.	p	
A.4.4. Does the project design engineering reflect current good practices?	2	DR	Yes, the project design does reflect current good practice. The design has been professionally developed.	p	
A.4.5. Does the description of the technology to be applied provide sufficient and transparent input to evaluate its impact on the greenhouse gas balance?	1,2	DR, I	Principally yes. <u>Clarification Request 3:</u> 1. The collection efficiency is indicated with 75 % in the PDD compared with 80 % used	CR 3	

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			in the calculations. Ecoinvest should explain this difference, use one unique number and explain why this number was used. 2. The description of the technology in the PDD mentions PVC or another impermeable material used to prevent the biogas to come out through the landfill surface. However, during the on-site visit it was told by Santech to the validation team that the Brazilian legislation does not permit the use of PVC for such purposes. It will be used a polyethylene of high density (PHDB) for the project. Ecoinvest should adjust these informations in the PDD.		
A.4.6. Is the brief explanation how the project will reduce greenhouse gas emission transparent and suitable?	2	DR	Yes, the brief explanation how the project will reduce greenhouse gas emission is transparent and suitable.	p	
A.4.7. Is all information provided in compliance with actual situation or planning as available by the project participants?	1,2	DR, I	Yes. All information is provided in compliance with actual situation or planning as available by the project participants.	p	
A.4.8. 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?	1,2	DR, I	Yes, the project does apply state of the art equipment.	p	

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A.4.9. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	1,2	DR, I	No. The project equipment can be expected to run for the whole project period and it can not be expected that it will be replaced by more efficient technologies, but additional components could be added using biogas to generate heat and produce electricity	p	
A.4.10. Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?	1,2	DR, I	Yes, initial training and maintenance efforts are required. During the visit at the project sites the project owner confirmed that such training is envisaged. However, at the current stage of the project it is not clear when the training will be realised.	p	
A.4.11. Does the project make provisions for meeting training and maintenance needs?	1,2	DR, I	See A.4.10.	p	
A.4.12. Is a schedule available on the implementation of the project and are there any risks for delays?	1,2	DR, I	It is a schedule available on the implementation of the project.	p	
A.4.13. Is the form required for the indication of projected emission reductions correctly applied?	2	DR	The form required for the indication of projected emission reductions is correctly applied.	p	
A.5. Public Funding					
A.5.1. Is all information on public funding provided in compliance with actual situation or planning as	1,2	DR, I	According to Santech Ltda. there is no public funding involved in the project. According	CR 4	

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available by the project participants?			to Santech Ltda. the project will be financed by own equity capital and private credits. <u>Clarification Request 4:</u> However it has not been presented neither a financial nor a business plan to the validation team showing that the financing of the project will be realised by own equity capital and private credits. The validation team may accept the statements made by Santech during the on-site visit only if the necessary documents will be provided within 8-10 weeks to the validation team as promised by Santech Ltda. during the on-site visit.		
A.5.2. Is all information provided in consistency with details provided by further chapters of the PDD (in particular annex 2)?	2	DR	Yes. All information is consistent.	p	
B. Baseline Methodology					
B.1.Choice and Applicability					
B.1.1. Is the baseline methodology previously approved by the CDM Methodology Panel?	2,20	DR	The baseline methodology previously approved by the CDM Methodology Panel is ACM0001 "Consolidated baseline methodology for landfill gas project activities" (ver-	p	

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			sion 4, 28 July 2006).		
B.1.2. Is the choice of the methodology correctly justified by the PDD?	2,20	DR	The choice of the methodology is correctly justified by the PDD.	p	
B.1.3. Is the baseline methodology the one deemed most applicable for this project?	1,2,20	DR,I	The baseline methodology is the most applicable for this project.	p	
B.1.4. Is the project in conformance with all applicability criteria of the applied methodology?	1,2,20	DR,I	The project is in conformance with all applicability criteria of the applied methodology.	p	
B.2. Application of the Baseline Methodology / Identification of the Baseline Scenario					
B.2.1. Is the application of the methodology and the discussion and determination of the chosen baseline transparent?	1,2,20	DR,I	Yes. The application of the methodology is transparent.	p	
B.2.2. Does the application consider all potential baseline scenarios in the discussion?	2,20	DR	Yes. The application considers all potential baseline scenarios in the discussion.	p	
B.2.3. Is conservativeness addressed in the way of identifying the baseline?	2	DR	Depending on the answer of CR 3 by the project developer, conservativeness is not absolutely addressed in all issues in the way of identifying the baseline. See A.4.5.	See CR 3	
B.2.4. Has the baseline been established on a project-specific basis?	1,2	DR,i	The baseline has been established on a project-specific basis.	p	
B.2.5. Does the baseline scenario sufficiently take into account relevant national and/or sectoral poli-	1,2	DR,I	The baseline scenario does sufficiently take into account relevant national and/or sec-	p	

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cies, macro-economic trends and political aspirations?			toral policies, macro-economic trends and political aspirations.		
B.2.6. Is the baseline determination compatible with the available data?	1,2,4,24,26	DR,I	Yes. The baseline determination is compatible with the available data.	p	
B.2.7. Does the selected baseline represent the most likely scenario among other possible and/or discussed scenarios?	2	DR	Yes. The selected baseline represents the most likely scenario.	p	
B.2.8. Does the PDD follow the approach for identifying the baseline scenario as given by the approved methodology?	2	DR	Yes. The PDD follows the approach for identifying the baseline scenario as given by the approved methodology.	p	
B.2.9. Is all literature and sources clearly referenced?	2	DR	No. Not all Literature and sources are clearly referenced and/or indicated. <u>Clarification Request 5:</u> 1. Equation 6 of chapter B.6.1. describes $MD_{reg,y}$ as "the quantity of methane destroyed for the generation of thermal energy". However, equation 1 of chapter B.6.1. describes it as "the amount of methane that would have been destroyed/combusted during the year in the absence of the project, in	CR 5	

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			tonnes of methane (tCH ₄)". Equation 6 of chapter B.6.1. has to use the same explanation of the parameter MD _{reg,y} as the equation 1 which is the definition given in the methodology. 2. It should be indicated the literature used for the Adjustment Factor of 20 %, the rate of biogas collection of 80 % and the flare efficiency which is indicated between 95 and 96 % in the PDD.		
B.3.Additionality					
B.3.1. Is the discussion of how emission reductions are achieved by the project scenario in comparison to the identified baseline scenario provided in a transparent manner?	2,28	DR	Yes. The discussion of how emission reductions are achieved by the project scenario in comparison to the baseline scenario is provided in a transparent manner.	p	
B.3.2. In case of using calculation models in order to demonstrate emission reductions: Are all formulae and input data based on provable records?	2	DR,	For demonstrating the additionality no calculation models have been applied	p	
B.3.3. Does the PDD clearly demonstrate the additionality using the approach as given by the methodology?	2,28	DR	Yes. The PDD clearly demonstrate the additionality using the approach as given by the methodology.	p	

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B.3.4. In case of using the additionality tool: Are all steps followed in a transparent and provable manner?	2,28	DR	Yes. All steps are followed in a transparent and provable manner using the additionality tool.	p	
B.3.5. Does the discussion sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?	1,2	DR,I	Yes. The discussion mentions some national and sectoral policies and macro-economic trends.	p	
B.3.6. Does the CDM registration have any impact on the implementation of the project?	1,2	DR,I	The CDM registration plays a key role for the realization of the project.	p	
B.3.7. Is the approach for demonstrating additionality provided by the most recent (or still applicable) methodology correctly applied?	2,20,28	DR	The approach for demonstrating additionality is correctly applied by the most recent methodology.	p	
B.3.8. Are other proofs than anecdotal evidence for all assumptions and statements used by the additionality discussion?	2	DR	Yes. There are used other proofs than only anecdotal evidence for the assumptions and statements used by the additionality discussion.	p	
B.4. Project Boundary					
B.4.1. Are all emission related to the baseline scenario clearly identified and described in a complete manner?	1,2	DR,I	Yes. All emission related to the baseline scenario is clearly identified and described in a complete manner.	p	
B.4.2. In case of grid connected electricity projects: Is the relevant grid correctly identified due to the	--	--	This question is not applicable to the project, as it is not a grid connected electricity	p	

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EB guidance and the underlying methodology?			project.		
B.4.3. Are all emission related to the project scenario clearly identified and described in a complete manner?	1,2	DR, I	All emission related to the project scenario are clearly identified and described in a complete manner.	p	
B.4.4. Are all emission related to leakage clearly identified and described in a complete manner?	--	--	Not applicable as a leakage calculation is not required according to the methodology.	p	
B.5. Detailed Baseline Information					
B.5.1. Is there any indication of a date when determine the baseline?	2	DR	Yes. The baseline has been completed on July, 26, 2006.	p	
B.5.2. Is this in consistency with the time line of the PDD history?	2	DR	Yes. It is in consistency with the time line of the PDD history.	p	
B.5.3. Is all data required provided in a complete manner by annex 3 of the PDD?	2	DR	Annex 3 of the PDD does provide all data in a complete manner.	p	
B.5.4. Is all data given in compliance with the methodology?	2,20	DR	Yes. All data is in compliance with the methodology.	p	
B.5.5. Is all data evidence by official data sources or replicable records?	2	DR	Not all data is evidenced by official data sources or replicable records. See B.2.9.	CR 5	
B.5.6. Is the vintage of the baseline data correct?	1,2	DR,I	The vintage of the baseline data is correct.	p	

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C. Duration of the Project / Crediting Period					
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	1,2	DR, I	The project's starting date is indicated as March 31, 2005 in the PDD. The validation team has verified this date on-site and may confirm that both starting date and operational lifetime are clearly defined and reasonable.	p	
C.1.2. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	1,2	DR,I	<u>Clarification Request 6:</u> The start of the crediting period is defined in the PDD for April 1 st , 2007. However, the validation team has noticed during the on-site visit that this starting date is rather improbable as the project equipment will be purchased only in the beginning of 2007 and installation needs about 6 months. The validation team asks to clarify Ecoinvest if the envisioned project schedule is feasible?	CR 6	
D. Monitoring Plan					
D.1. Monitoring Methodology					
D.1.1. Is the monitoring methodology previously approved by the CDM Methodology Panel?	2,22	DR	The monitoring methodology previously approved by the CDM Methodology Panel is	p	

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			ACM0001 "Consolidated monitoring methodology for landfill gas project activities" (version 4, 28 July 2006).		
D.1.2. Is the choice of the methodology correctly justified by the PDD?	2,22	DR	Yes. The choice of the methodology is correctly justified by the PDD.	p	
D.1.3. Is the project in conformance with all applicability criteria of the applied methodology?	2,22	DR	The project is in conformance with all applicability criteria of the applied methodology.	p	
D.1.4. Does the monitoring methodology provide a consistent approach in the context of all parameter to be monitored and further information provided by the PDD?	2,22	DR	Yes. The monitoring methodology provides a consistent approach in the context of all parameter to be monitored and further information provided by the PDD.	p	
D.1.5. Does the monitoring methodology apply consistently the choice of the option selected for monitoring both of project and baseline emissions?	2,22	DR	The applied and approved methodology does not specify the monitoring of project emissions	p	
D.2. Monitoring of Project Emissions (if applied)					
D.2.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the greenhouse gas emissions within the project boundary during the crediting period?	1,2, 22	DR, I	Not applicable as the methodology does not specify the monitoring of project emissions. Regarding the calculation of the South-Southeast grid emission factor (according to ACM0002) which is based on the years 2002, 2003 and 2004, the validation team, agrees to that calculation and data basis	p	

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			only on the assumption that during the issuance of the Letter of Approval by the Brazilian Designated National Authority the available data basis can not be updated. In case of updated available data the appropriate grid factor has to be updated.		
D.2.2. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the approved methodology applied?	20, 22	DR	Not applicable as according to the methodology project emissions do not have to be monitored.	p	
D.2.3. Will it be possible to determine the specified project GHG indicators?	20, 22	DR	Not applicable.	p	
D.2.4. Will the indicators enable comparison of project data and performance over time?	20, 22	DR	Not applicable.	p	
D.2.5. Is the information given for each monitoring variable by the presented table sufficient to ensure the verification of a proper implementation of the monitoring plan?	20, 22	DR	Not applicable.	p	
D.2.6. Is the information given for each monitoring variable by the presented table sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	20, 22	DR	Not applicable.	p	

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D.2.7. Is the monitoring approach in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy?	20, 22	DR	Not applicable.	p	
D.2.8. Are all formulae used to determine project emission clearly indicated and in compliance with the monitoring methodology.	20, 22	DR	Not applicable.	p	
D.3. Monitoring of Baseline Emissions (if applied)					
D.3.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the greenhouse gas emissions of the baseline emissions during the crediting period?	1,2, 20, 22	DR,I	<p>The monitoring plan in the PDD describes the collection and archiving of all relevant data necessary for estimation or measuring the GHG emissions of the baseline emissions during the crediting period.</p> <p><u>Clarification Request 7:</u></p> <p>However, during the on-site visit there has not been presented documents like a Monitoring Manual or monitoring procedures to the validation team showing how the monitoring looks like and confirming the information given in the PDD. Santech has assured to the validation team to provide such information within 8-10 weeks from the date of the on-site visit. Ecoinvest and Santech should make sure, that the validation team</p>	CR 7	

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			will receive the necessary information.		
D.3.2. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the approved methodology applied?	1,2, 20, 22	DR,I	Yes. The choices of project GHG indicators are reasonable and in conformance with the requirements set by the approved methodology.	p	
D.3.3. Will it be possible to determine the specified project GHG indicators?	1,2, 20, 22	DR,I	Yes, according to given information in the PDD the required parameters will be able to be monitored.	p	
D.3.4. Is the information given for each monitoring variable by the presented table sufficient to ensure the verification of a proper implementation of the monitoring plan?	1,2, 20, 22	DR,I	Yes. The information is sufficient to ensure the verification of a proper implementation of the monitoring plan.	p	
D.3.5. Is the information given for each monitoring variable by the presented table sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	1,2, 20, 22	DR,I	The given information is sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records.	p	
D.3.6. Is the monitoring approach in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy?	1,2, 20,	DR,I	Yes. The monitoring approach is in line with current good practice.	p	

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D.3.7. Are all formulae used to determine baseline emission clearly indicated and in compliance with the monitoring methodology.	1,2, 20, 22	DR,I	Yes. All formulae used to determine base-line emission are clearly indicated and in compliance with the monitoring methodology.	p	
D.4. Direct Monitoring of Emission Reductions (if applied)					
D.4.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring directly the greenhouse gas emissions reductions during the crediting period?	1,2, 20, 22	DR,I	All relevant data necessary for estimation or measuring the GHG emission reductions are provided.	p	
D.4.2. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the approved methodology applied?	1,2, 20, 22	DR,I	Yes. The choices of project GHG indicators are reasonable and in conformance with the requirements set by the approved methodology.	p	
D.4.3. Will it be possible to determine the specified project GHG indicators?	1,2, 20, 22	DR,I	Yes. It will be possible to determine the specified project GHG indicators.	p	
D.4.4. Is the information given for each monitoring	1,2,		Yes. The information is sufficient to ensure	p	

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variable by the presented table sufficient to ensure the verification of a proper implementation of the monitoring plan?	20, 22	DR,I	the verification of a proper implementation of the monitoring plan.		
D.4.5. Is the information given for each monitoring variable by the presented table sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	1,2, 20, 22	DR,I	The given information is sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records.	p	
D.4.6. Is the monitoring approach in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy?	1,2, 20, 22	DR,I	Yes. The monitoring approach is in line with current good practice.	p	
D.4.7. Are all formulae used to determine project emission reductions clearly indicated and in compliance with the monitoring methodology.	1,2, 20, 22	DR	Yes. All formulae used to determine project emission reductions are clearly indicated and in compliance with the monitoring methodology.	p	
D.5. Monitoring of Leakage (if applicable)					
D.5.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring of leakage emissions during the crediting period?	--	--	Leakage do not need to be accounted under the methodology ACM0001. Hence questions D.5.1.-D.5.7. are not applicable.	p	

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D.5.2. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the approved methodology applied?	--	--	Not applicable. See D.5.1.	p	
D.5.3. Will it be possible to determine the specified project GHG indicators?	--	--	Not applicable. See D.5.1.	p	
D.5.4. Is the information given for each monitoring variable by the presented table sufficient to ensure the verification of a proper implementation of the monitoring plan?	--	--	Not applicable. See D.5.1.	p	
D.5.5. Is the information given for each monitoring variable by the presented table sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	--	--	Not applicable. See D.5.1.	p	
D.5.6. Is the monitoring approach in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy?	--	--	Not applicable. See D.5.1.	p	
D.5.7. Are all formulae used to determine leakage emissions clearly indicated and in compliance with the monitoring methodology.	--	--	Not applicable. See D.5.1.	p	

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D.6. Determination of Emission Reductions					
D.6.1. Are all formulae used to determine leakage emissions clearly indicated and in compliance with the monitoring methodology.	--	--	Not applicable. See D.5.1.	p	
D.6.2. Is the information given for each calculated variable sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	1,2,4 ,24, 26	DR,I	The given information is sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records.	p	
D.7. Quality Control (QC) and Quality Assurance (QA) Procedures					
D.7.1. Is the selection of data undergoing quality control and quality assurance procedures complete?	2,20, 22	DR	The selection of data is complete.	p	
D.7.2. Is the belonging determination of uncertainty levels done correctly for each ID in a correct and reliable manner?	2,20, 22	DR	There are not determined uncertainty levels for certain parameters mentioned in the methodology. <u>Clarification Request 8:</u> Although chapter B.7.1 mentions quality control procedures and quality assurance procedures for certain parameters, it is nothing said about the uncertainty levels,	CR 8	

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			which are mentioned in the methodology. Ecoinvest should add the uncertainty levels for such parameters, where QC and QA procedures are mentioned.		
D.7.3. Are quality control procedures and quality assurance procedures sufficiently described to ensure the delivery of high quality data?	2,20, 22	DR	In the PDD QC and QA procedures are described. However during the on-site visit information has not been available yet for the validation team how these procedures will look like in practice. See D.3.1.	CR 7	
D.7.4. Is it ensured that data will be bound to national or internal reference standards?	1,2	DR,I	Yes. That data will be bound to national reference standards..	p	
D.8. Operational and management structure					
D.8.1. Is the authority and responsibility of project management clearly described?	1,2	DR,I	Santech is author and the responsible for the project management.	p	
D.8.2. Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	1,2	DR,I	Santech is author and the responsible for registration, monitoring, measurement and reporting.	p	
D.8.3. Are procedures identified for training of monitoring personnel?	1,2	DR,I	As the project equipment will be purchased only in the beginning of next year, there are no procedures identified for training of monitoring personnel yet. Santech informed the	See CR 7	

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			validation team that information will be provided to the validation team within 8-10 weeks. See D.3.1.		
D.8.4. Are procedures identified for emergency preparedness for cases where emergencies can cause unintended emissions?	1,2	DR,I	See D.3.1.	See CR 7	
D.9. Monitoring Plan (Annex 4)					
D.8.5. Is the monitoring plan developed in a project specific manner clearly addressing the unique features of the CDM activity?	1,2	DR,I	<u>Clarification Request 9:</u> The monitoring information in Annex 4 is referring to Table 4b that explains the monitoring and calibration procedures. However, it is not possible for the validation team to find this Table in the PDD.	CR 9	
D.8.6. Does the monitoring plan completely describes all measures to be implemented for monitoring all parameter required?	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and CR 9	
D.8.7. Does the monitoring plan completely describes all measures to be implemented for ensuring data quality of all parameter to be monitored?	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and CR 9	
D.8.8. Does the monitoring plan provide information on monitoring equipment and respective position-	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and	

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ing in order to safeguard a proper installation?				CR 9	
D.8.9. Are procedures identified for calibration of monitoring equipment?	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and CR 9	
D.8.10. Are procedures identified for maintenance of monitoring equipment and installations?	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and CR 9	
D.8.11. Are procedures identified for monitoring, measurements and reporting?	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and CR 9	
D.8.12. Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and CR 9	
D.8.13. Are procedures identified for dealing with possible monitoring data adjustments and uncertainties?	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and CR 9	
D.8.14. Does the monitoring plan provide procedures identified for troubleshooting allowing redundant reconstruction of data in case of monitoring problems?	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and CR 9	
D.8.15. Are procedures identified for review of reported results/data?	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and	

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				CR 9	
D.8.16. Are procedures identified for internal audits of GHG project compliance with operational requirements where applicable?	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and CR 9	
D.8.17. Are procedures identified for project performance reviews before data is submitted for verification, internally or externally?	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and CR 9	
D.8.18. Are procedures identified for corrective actions in order to provide for more accurate future monitoring and reporting?	1,2	DR,I	See D.3.1. and D.8.5.	See CR 7 and CR 9	
E. Calculation of GHG Emissions by Source					
E.1. Predicted Project GHG Emissions					
E.1.1. Are all aspects related to direct and indirect GHG emissions captured in the project design?	1,2,4 ,24,2 6	DR,I	All aspects related to direct and indirect GHG emissions are captured in the project design.	p	
E.1.2. Are the GHG calculations documented in a complete and transparent manner?	1,2,4 ,24,2 6	DR,I	The GHG calculations are documented in a complete and transparent manner.	p	
E.1.3. Have conservative assumptions been used to calculate project GHG emissions?	1,2,4 ,24,2 6	DR,I	Yes. Conservative assumptions have been used to calculate project GHG emissions.	p	

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E.1.4. Are uncertainties in the GHG emissions estimates properly addressed in the documentation?	1,2,4,24,26	DR,I	According to the methodology.	p	
E.1.5. Is the projection based on same procedures as used for later monitoring or acceptable alternative models?	-	-	There is no need for any projection.	p	
E.1.6. Is the projection based on provable input parameter?	-	-	There is no need for any projection.	p	
E.2. Leakage					
E.2.1. Are potential leakage effects beyond the chosen project boundaries properly identified?	--	--	Not applicable as methodology does not require the calculation of leakage.	p	
E.2.2. Have these leakage effects been properly accounted for in calculations?	--	--	N/A. See E.2.1.	p	
E.2.3. Have conservative assumptions been used to calculate leakage emissions?	--	--	N/A. See E.2.1.	p	
E.2.4. Are uncertainties in the leakage estimates properly addressed in the documentation?	--	--	N/A. See E.2.1.	p	
E.2.5. Is the projection based on same procedures as used for later monitoring or acceptable alternative models?	--	--	N/A. See E.2.1.	p	
E.2.6. Is the projection based on provable input parameter?	--	--	N/A. See E.2.1.	p	

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E.3. Baseline Emissions					
E.3.1. Have the most relevant and likely operational characteristics and baseline indicators been chosen as reference for baseline emissions?	1,2, 20, 22, 24, 26	DR,I	Yes. The most relevant and likely operational characteristics and baseline indicators have been chosen as reference for baseline emissions.	p	
E.3.2. Are the baseline boundaries clearly defined and do they sufficiently cover sources and sinks for baseline emissions?	1,2	DR,I	In the PDD it is only mentioned the baseline boundary for emissions and not explicitly the spatial boundary. <u>Clarification Request 10:</u> The PDD should explicitly mention the spatial boundaries of the project activity, regarding the sources.	CR 10	
E.3.3. Are the GHG calculations documented in a complete and transparent manner?	1,2,4 ,20, 22	DR,I	The GHG calculations are documented in a complete and transparent manner.	p	
E.3.4. Have conservative assumptions been used when calculating baseline emissions?	1,2,4 ,20, 22	DR	Conservative assumptions have been used when calculating baseline emissions.	p	

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E.3.5. Are uncertainties in the GHG emission estimates properly addressed in the documentation?	1,2,4 ,20, 22	DR,I	According to the methodology.	p	
E.3.6. Is the projection based on same procedures as used for later monitoring or acceptable alternative models?	1,2,4 ,20, 22	DR,I	According to the methodology the ex-ante projection of the baseline emissions is different to the later monitoring.	p	
E.3.7. Is the projection based on provable input parameter?	1,2,4 ,20, 22	DR,I	See E.3.6.	p	
E.4. Emission Reductions					
E.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	1,2,4 ,24, 26	DR,I	Yes. The project will result in fewer GHG emissions than the baseline scenario.	p	
E.4.2. Is the form/table required for the indication of projected emission reductions correctly applied?	2	DR	Yes. The form required for the indication of projected emission reductions is correctly applied.	p	
E.4.3. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	1,2	DR,I	See C.1.2.	See CR 6	

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F. Environmental Impacts					
F.1.1. Has an analysis of the environmental impacts of the project activity been sufficiently described?	1,2	DR,I	Yes. The environmental impacts of the project activity have been sufficiently described.	p	
F.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	1,2	DR,I	An EIA is not necessary.	p	
F.1.3. Will the project create any adverse environmental effects?	1,2	DR,I	No. The project will not create any adverse environmental effects.	p	
F.1.4. Are transboundary environmental impacts considered in the analysis?	1,2	DR,I	There are no transboundary environmental impacts.	p	
F.1.5. Have identified environmental impacts been addressed in the project design?	1,2	DR,I	Identified environmental impacts have been addressed in the project design.	p	
F.1.6. Does the project comply with environmental legislation in the host country?	1,2, 10	DR,I	The project complies with the environmental legislation in the host country.	p	
G. Stakeholder Comments					
G.1.1. Have relevant stakeholders been consulted?	1,2, 12	DR,I	Yes. Relevant stakeholders have been consulted.	p	

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G.1.2. Have appropriate media been used to invite comments by local stakeholders?	1,2, 12	DR,I	The invitations to local stakeholders were sent by postal to local stakeholders. <u>Clarification Request 11:</u> Ecoinvest (who was in charge for the invitations) has provided all receipts to the validation team, showing that the invitations were sent to the local stakeholders. However, one receipt, namely for the “Local community association” is still missing. Ecoinvest should provide this missing receipt to the validation team.	CR 11	
G.1.3. 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?	1,2, 12	DR,I	The Brazilian DNA gives guidance how the local stakeholder process has to be conducted. The validation team may confirm that the process has been performed as required.	p	
G.1.4. Is the undertaken stakeholder process described in a complete and transparent manner?	1,2, 12	DR,I	Yes. The undertaken stakeholder process is described in a complete and transparent manner..	p	
G.1.5. Is a summary of the stakeholder comments received provided?	1,2, 12	DR,I	There were made only positive comments supporting the project. Negative comments have not been received.	p	

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G.1.6. Has due account been taken of any stakeholder comments received?	1,2, 12	DR,I	See G.1.5.	p	

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Table 1b Conformity of Project Activity and PDD (Second Global Stakeholder Consultation Process)				
CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
A. General description of project activity				
A.1. Title of the project activity				
A.1.1. Does the used project title clearly enable to identify the unique CDM activity?	1,2	The project title clearly enables to identify the unique CDM activity	p	p
A.1.2. Are there any indication concerning the revision number and the date of the revision?	1,2	Yes. Version and date of the PDD are indicated.	p	p
A.1.3. Is this consistent with the time line of the project's history?	1,2	Yes. It is consistent with the time line of the project's history.	p	p
A.2. Description of the project activity				
A.2.1. Is the description delivering a transparent overview of the project activities?	1,2	<u>Corrective Action Request 2:</u> Project participants (PPs) are requested to mention in the description of the PDD the significance of the autoclave and that this autoclave will produce thermal energy. Till now, it is not clear that it is the autoclave which will produce the thermal energy.	CAR 2	p
A.2.2. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?	1,2	During the on-site visit the validation team was able to see the Environmental Education Centre and has been convinced that Santech has a strong social responsibility. <u>Corrective Action Request 3:</u> The following documents should be provided to the validation team in order to prove that the project description is in compliance with the actual situation: -Proof(s) about the current passive venting system	CAR 3	p

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		-Proofs (photos, documents) about the enclosed flares -Evidences about the installation of the methane collection and destruction equipment -Proof about the (upcoming) installation of the autoclave		
A.2.3. Is the information provided by these proofs consistent with the information provided by the PDD?	1,2	See A.2.2.	See CAR 3	p
A.2.4. Is all information presented consistent with details provided by further chapters of the PDD?	1,2	All information presented is consistent with details provided by further chapters of the PDD.	p	p
A.3. Project participants				
A.3.1. Is the form required for the indication of project participants correctly applied?	1,2	The form required for the indication of project participants is correctly applied.	p	p
A.3.2. Is the participation of the listed entities or Parties confirmed by each one of them?	1,2,3,8	The participation of the listed entities was confirmed by each one of them.	p	p
A.3.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	1,2,3	All information is consistent with details provided in annex 1.	p	p
A.4. Technical description of the project activity				
<i>A.4.1. Location of the project activity</i>				

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A.4.1.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	1,2	The information provided on the location of the project activity allows for a clear identification of the site.	p	p
A.4.1.2. How is it ensured and/or demonstrated, that the project proponents can implement the project at this site (ownership, licenses, contracts etc.)?	1,2,4	Santech has leased the site for indefinite time (i.e. until the project lifetime will have been finished), which allows the implementation of the project	p	p
A.4.2. Category(ies) of project activity				
A.4.2.1. Is the project category (Scope 13 / Waste handling and disposal) correctly identified and indicated?	1,2	Scope 13 is correctly identified and indicated.	p	p
A.4.3. Technology to be employed by the project activity				
A.4.3.1. Does the technical design of the project activity reflect current good practices?	1,2	See A.4.3.2.	See CAR 4	p
A.4.3.2. Does the description of the technology to be applied provide sufficient and transparent input/ information to evaluate its impact on the greenhouse gas balance?	1,2	<p>The PDD provides information about the new forced exhaustion system. However, information about the enclosed flares and autoclave should be improved.</p> <p><u>Corrective Action Request 4:</u></p> <p>Project participants are requested to submit to the validation team and mention in the PDD the technical characteristics of</p> <ul style="list-style-type: none"> -the autoclave -enclosed flares and prove by evidences that indeed enclosed flares are/will be in use. -Besides, it should be indicated how many enclosed flares (are) 	CAR 4	p

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		will be in use.		
A.4.3.3. Does the implementation of the project activity require any technology transfer from annex-I-countries to the host country(ies)?	1,2	The project activity does not require any technology transfer from annex-I-countries to Brazil.	p	p
A.4.3.4. Is the technology implemented by the project activity environmentally safe?	1,2	The technology implemented by the project activity is environmentally safe.	p	p
A.4.3.5. Is the information provided in compliance with actual situation or planning?	1,2	The information provided is in compliance with actual situation.	p	p
A.4.3.6. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	1,2	The project activity uses state of the art technology.	p	p
A.4.3.7. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	1,2	No. The project equipment can be expected to run for the whole project period and it can not be expected that it will be replaced by more efficient technologies, but additional components could be added using biogas to produce electricity.	p	p
A.4.3.8. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?	1,2	Corrective Action Request 5: Evidences (certificates, participation lists) about training of personnel involved in the CDM project activity should be submitted to the validation team. Besides, it should be clear what demand and	CAR 5	p

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		requirements for training and maintenance exist.		
A.4.3.9. Is information available on the demand and requirements for training and maintenance?	1,2	See A.4.3.8.	See CAR 5	p
A.4.3.10. Is a schedule available for the implementation of the project and are there any risks for delays?	1,2	<u>Corrective Action Request 6:</u> It should be submitted a time schedule showing the single steps of implementation of the capture and flaring system as well as the autoclave. It should be clearly defined the project's starting date and be evidenced why that specific date was taken.	CAR 6	p
A.4.4. Estimated amount of emission reductions over the chosen crediting period				
A.4.4.1. Is the form required for the indication of projected emission reductions correctly applied?	1,2	The form required for the indication of projected emission reductions is correctly applied.	p	p
A.4.4.2. Are the figures provided consistent with other data presented in the PDD?	1,2	Yes. The figures provided are consistent with other data presented in the PDD.	p	p
A.4.5. Public funding of the project activity				
A.4.5.1. Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?	1,2,6	No public funding is involved in the project activity. The project is financed by own equity. A declaration has been submitted to the validation team.	p	p
A.4.5.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex	1,2,6	Information is consistent with Annex 2 of the PDD.	p	p

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2)?					
B. Application of a baseline and monitoring methodology					
B.1. Title and reference of the approved baseline and monitoring methodology					
B.1.1. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	1,2,9,10	The project applies ACM0001, version 6. It is clearly indicated.	p	p	
B.1.2. Is the applied version the most recent one and / or is this version still applicable?	1,2,9,10	The applied version 6 is the most recent version.	p	p	
B.2. Justification of the choice of the methodology and why it is applicable to the project activity					
B.2.1. Is the applied methodology considered the most appropriate one?	1,2,9,10	The applied methodology is considered to be the most appropriate one.	p	p	
B.2.2. Criteria 1: Is applicable to landfill gas capture project activities.	1,2,9,10		p	p	
		Applicability checklist			Yes / No
		Criterion discussed in the PDD?			Yes
		Compliance provable?			Yes
		Compliance verified?			Yes
B.2.3. Criteria 2: applicable where the baseline scenario is the partial or total atmospheric release of the gas.	1,2,9,10		p	p	
		Applicability checklist			Yes / No
		Criterion discussed in the PDD?			Yes

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		Compliance provable?	Yes												
		Compliance verified?	Yes												
B.2.4. Criteria 3: the gas and the project activities include situations such as: a) The captured gas is flared; or b) The captured gas is used to produce energy (e.g. electricity/thermal energy), or c) The captured gas is used to supply consumers through natural gas distribution network. If emissions reduction are claimed for displacing natural gas, project activities may use the approved methodology AM0053.	1,2,9,10	<table><tr><td>Applicability checklist</td><td>Yes / No</td></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr><tr><td>Is the option correctly presented and confirmed?</td><td>Option (a) and (b) is correctly presented and confirmed.</td></tr></table>		Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Compliance verified?	Yes	Is the option correctly presented and confirmed?	Option (a) and (b) is correctly presented and confirmed.	p	p
Applicability checklist	Yes / No														
Criterion discussed in the PDD?	Yes														
Compliance provable?	Yes														
Compliance verified?	Yes														
Is the option correctly presented and confirmed?	Option (a) and (b) is correctly presented and confirmed.														
Tool to determine project emissions from flaring gases containing methane															
B.2.5. Criterion 1: Is the residual gas stream (RG) containing	1,2,11	None of the criteria 1-3 is discussed in the PDD. <u>Corrective Action Request 7:</u>		CAR 7	p										

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CHECKLIST TOPIC / QUESTION		Ref.	COMMENTS		PPD in GSP	Final PDD								
methane?			Criteria 1-3 of the flaring tool should be discussed in the PDD. <table><tr><td>Applicability checklist</td><td>Yes / No</td></tr><tr><td>Criterion discussed in the PDD?</td><td>No</td></tr><tr><td>Compliance provable?</td><td>No</td></tr><tr><td>Compliance verified?</td><td>No</td></tr></table>		Applicability checklist	Yes / No	Criterion discussed in the PDD?	No	Compliance provable?	No	Compliance verified?	No		
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	No													
Compliance provable?	No													
Compliance verified?	No													
B.2.6.	Criterion 2: Is the residual gas stream (RG) to be flared containing no other combustible gases than methane, carbon monoxide and hydrogen?	1,2, 11	See B.2.5. <table><tr><td>Applicability checklist</td><td>Yes / No</td></tr><tr><td>Criterion discussed in the PDD?</td><td>No</td></tr><tr><td>Compliance provable?</td><td>No</td></tr><tr><td>Compliance verified?</td><td>No</td></tr></table>		Applicability checklist	Yes / No	Criterion discussed in the PDD?	No	Compliance provable?	No	Compliance verified?	No	See CAR 7	p
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	No													
Compliance provable?	No													
Compliance verified?	No													
B.2.7.	Criterion 3: Is the residual gas stream (RG) to be flared obtained from decomposition of organic material (through landfills, bio-digesters or anaerobic lagoons, among others) or from gases vented in coal mines (coal mine methane and coal bed methane)?	1,2, 11	See B.2.5. <table><tr><td>Applicability checklist</td><td>Yes / No</td></tr><tr><td>Criterion discussed in the PDD?</td><td>No</td></tr><tr><td>Compliance provable?</td><td>No</td></tr><tr><td>Compliance verified?</td><td>No</td></tr></table>		Applicability checklist	Yes / No	Criterion discussed in the PDD?	No	Compliance provable?	No	Compliance verified?	No	See CAR 7	p
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	No													
Compliance provable?	No													
Compliance verified?	No													
B.2.8.	Is the chosen equipment in line with the definitions of flaring tool (open, enclosed	1,2, 11	It is not proven yet by the project participants, that enclosed flares will be used in the project activity.		See CAR 4	p								

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flare)		See A.4.3.2.												
B.3. Description of the sources and gases included in the project boundary														
B.3.1. Source: Possible CO ₂ emissions resulting from combustion of other fuels than the methane recovered fuel combustion, e.g. for transport or for the collection of landfill gas) Description of Source Gas(es): CO ₂ Type: Project Emissions	1,2,9,10	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed in the PDD?</td><td>No</td></tr><tr><td>Inclusion / exclusion justified?</td><td></td></tr><tr><td>Explanation / Justification sufficient?</td><td></td></tr><tr><td>Consistency with monitoring plan?</td><td></td></tr></table> <p>Corrective Action Request 8:</p> <p>It should be discussed in the PDD whether CO2 emissions for transport or for the collection of landfill gas occur.</p> <p>If there does not occur any CO2 emissions resulting from combustion of other fuels than the methane recovered fuel combustion, then this source should be discussed as excluded in the PDD.</p>	Boundary checklist	Yes / No	Source and gas(es) discussed in the PDD?	No	Inclusion / exclusion justified?		Explanation / Justification sufficient?		Consistency with monitoring plan?		CAR 8	p
Boundary checklist	Yes / No													
Source and gas(es) discussed in the PDD?	No													
Inclusion / exclusion justified?														
Explanation / Justification sufficient?														
Consistency with monitoring plan?														
B.3.2. If the electricity for project activity is sourced from grid or electricity generated by the LFG captured would have been generated by power generation sources connected to the grid, the project boundary shall include all the power generation sources connected to the grid to which the project activity is connected.	1,2,9,10	The Brazilian Interconnected Grid (S-SE-CO) is included in the spatial boundary as CO2 is emitted for the consumption of electricity.	p	p										

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B.3.3. If the electricity for the project activity is from a captive generation source or electricity generated by the captured LFG would have been generated by a captive power plant, the captive power plant shall be included in the project boundary.	--	Not applicable.	p	p
B.3.4. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included to the PDD?	1,2,9,10	The spatial and technological boundaries as verified on-site comply with the discussion provided by the PDD.	p	p
B.4. Description of how the baseline scenario is identified and description of the identified baseline scenario				
B.4.1. Is it explained how the most plausible baseline scenario is identified (Step 1 of the additionality tool)	1,2,9,10,14	It is explained how the most plausible baseline scenario is identified.	p	p
B.4.2. Is a transparent and detailed description of the identified baseline scenario included (description of the technology that would be employed and/or the activities that would take place)?	1,2,9,10,14	Yes, a transparent and detailed description of the identified baseline scenario is included. In the baseline scenario the passive venting system would be used.	p	p
B.4.3. Is it clearly indicated that the baseline scenario for the landfill gas is either the atmospheric release of landfill gas or landfill gas is partially captured and subsequently flared (LFG2)?	1,2,9,10,14	Yes. It is clearly indicated that the baseline scenario for the landfill gas is that "large quantities of biogas (LFG), whose major contents are methane (CH ₄) and carbon dioxide (CO ₂), would be emitted to the atmosphere".	p	p

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B.4.4. Is it clearly indicated that the baseline scenario for the energy component is that electricity is obtained from an existing/new fossil based captive power plant or from the grid (P4 or P6) and that heat is from an existing/new fossil fuel based boiler (H4)?	1,2,9,10,14	<u>Corrective Action Request 9:</u> -It should be clearly mentioned in the PDD that there is no base-line for electricity generation, as this part is not included in the project activity. -It should be in more detail explained that heat is generated in a diesel boiler for heat generation	CAR 9	p
B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM project activity (assessment and demonstration of additionality):				
B.5.1. If the starting date of the project activity is before the date of validation, is evidence available to prove that incentive from the CDM was seriously considered in the decision to proceed with the project activity?	1,17	The starting date of the project activity has been finally (in the last submitted PDD) defined as date when the contract between Ecoinvest (CDM consultant) and Santech was signed (06/06/2006). The contract itself proves that CDM was seriously considered in the decision to proceed with the project activity.	p	p
B.5.2. Has the most recent version of the additionality tool been applied?	1,2,9,10,14	The additionality tool with its last version (version 3) is not mentioned in the PDD. <u>Corrective Action Request 10:</u> It should be mentioned in the PDD that the additionality tool (version 3) is applied.	CAR 10	p
B.5.3. Have realistic and credible alternatives been identified providing comparable outputs or services? (step 1a)	1,2,9,10,14	It has not been mentioned the proposed project activity undertaken without being registered as a CDM activity. <u>Corrective Action Request 11:</u> According to the additionality tool and the methodology ACM0001	CAR 11	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		the proposed project activity undertaken without being registered as a CDM activity has to be included in the alternatives.		
<p>B.5.4. Are relevant policies and regulations related to the management of landfill sites taken into account?</p> <p>This may include mandatory landfill gas capture or destruction requirements because of safety issues or local environmental regulations. Other policies could include local policies promoting productive use of landfill gas such as those for the production of renewable energy, or those that promote the processing of organic waste.</p>	1,2,9 ,10, 14	There are no mandatory landfill gas capture or destruction requirements in Brazil nor any other policies promoting productive use of landfill gas.	p	p
B.5.5. Are taken into account local economic and technological circumstances when assessing alternative scenarios?	1,2,9 ,10, 14	There are taken into account local economic and technological circumstances when assessing alternative scenarios.	p	p
B.5.6. Is the project activity without CDM included in the alternatives (LFG 1)? (step 1a of additionality tool)	1,2,9 ,10, 14	See B.5.2.	See CAR 11	p
B.5.7. Is the atmospheric release of the landfill gas or partial capture of landfill gas and destruction to comply with regulations or contractual requirement, or to address safety and odour concerns included in the alternatives for the disposal/treatment of the waste in the absence of the project activity (LFG 2)?	1,2,9 ,10, 14	LFG 2 is included in the alternatives.	p	p

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B.5.8. Is a discussion provided for all identified alternatives concerning the compliance with applicable laws and regulations? (step 1b)	1,2,9 ,10, 14	The alternative LFG 2 is in compliance with applicable laws and regulations. See B.5.2.	See CAR 11	p
<p>B.5.9. Are national and/or sectoral policies and circumstances taken into account in the following ways:</p> <ul style="list-style-type: none"> ✓ Does the project developer show that the project activity is not the only alternative that is in compliance with all regulations (e.g. because it is required by law) (step 1b)? ✓ Do project participants via the adjustment factor AF in the baseline emissions take into account that some of the methane generated in the baseline may be captured and destroyed to comply with regulations or contractual requirement?. ✓ Do project participants monitor all relevant policies and circumstances at the beginning of each crediting period and adjust the baseline accordingly? 	1,2,9 ,10, 14	<ul style="list-style-type: none"> ✓ The project activity is not the only alternative that is in compliance with all regulations. ✓ It is considered an AF of 20 %. ✓ All relevant policies and circumstances are considered at the beginning of the first crediting period. 	p	p
B.5.10. In case the PDD argues that specific laws are not enforced in the country or region: Is evidence available concerning that statement? (step 1b)	1,2,9 ,10, 14	Not applicable.	p	p

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<p>B.5.11. In the case energy is exported to a grid and/or to a nearby industry, or used on-site: Are realistic and credible alternatives separately determined for:</p> <ul style="list-style-type: none"> ✓ Power generation in the absence of the project activity? ✓ Heat generation in the absence of the project activity? 	1,2,9 ,10, 14	<p>Although the PDD does not mention anything that power generation is not included in the project activity, it is well known to the validation team, that power generation is not included. Therefore it is not necessary to indicate an alternative for power generation in the absence of the project activity.</p> <p>See B.6.4.4.</p> <p>The PDD indicates a realistic alternative for heat generation in the absence of the project activity.</p>	See CAR 9	p
B.5.12. For Power generation: Is the correct option (P1-P6) chosen?	1,2,9 ,10, 14	Not applicable.	p	p
B.5.13. For Heat generation: Is the correct option (H1-H7) chosen?	1,2,9 ,10, 14	It is correctly chosen H4.	p	p
B.5.14. Is the fuel for the baseline choice of energy source identified taking into account the national and/or sectoral policies as applicable?	1,2,9 ,10, 14	Diesel oil is identified as baseline choice of energy source.	p	p
<p>B.5.15. Is it demonstrated that the identified baseline fuel is available in abundance in the host country and that there is no supply constraint?</p> <p>In case of partial supply constraints (seasonal sup-</p>	1,2,9 ,10, 14	The "Table: Production of diesel oil in Brazilian refineries - 2000-2007 (m3)" not necessarily shows that diesel oil is abundant in Brazil and that there is no supply constraint in the country. Consumption may be higher than production with the necessity to import the difference from other countries. In this case it is ob-	CAR 12	p

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ply), the project participants may consider an alternative fuel that result in lowest baseline emissions during the period of partial supply.		vious that diesel oil is not abundant. <u>Corrective Action Request 12:</u> Stronger evidences should be submitted to the validation team showing that diesel oil is abundant in Brazil. The PDD should be revised.		
B.5.16. Is detailed justification provided for the selected baseline fuel? As a conservative approach, the lowest carbon intensive fuel such as natural gas through out the period may be used.	1,2,9 ,10, 14	See B.5.14.	See CAR 12	p
B.5.17. In case of applying step 2 / investment analysis of the additionality tool (step 2 shall be applied for each component of the baseline, i.e. baseline for waste treatment, electricity generation and heat generation) : Is the analysis method identified appropriately (step 2a)?	1,2,9 ,10, 14	Step 2 (Investment analysis) is only applied for the waste treatment part. <u>Corrective Action Request 13:</u> Step 2 (Investment analysis) should be conducted for each component, i.e. in the project case also for the heat generation part.	CAR 13	p
B.5.18. In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM income?	1,2,9 ,10, 14	Yes. It is demonstrated that the project activity produces no economic benefits other than CDM related income. See B.5.17.	See CAR 13	p
B.5.19. In case of Option II (investment comparison analysis): Is the most suitable finan-	1,2,9	Not applicable.	p	p

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cial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	,10, 14			
B.5.20. In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	1,2,9, 10, 14	Not applicable.	p	p
B.5.21. In case of Option II or Option III: Is the calculation of financial figures for this indicator correctly done for all alternatives and the project activity?	1,2,9, 10, 14	Not applicable.	p	p
B.5.22. In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the utilized data?	1,2,9, 10, 14	Not applicable.	p	p
B.5.23. In case of applying step 3 (barrier analysis) of the additionality tool (step 3 shall be applied for each component of the baseline, i.e. baseline for waste treatment, electricity generation and heat generation): Is a complete list of barriers developed that prevent the different alternatives to occur?	1,2,9, 10, 14	Not applicable.	p	p
B.5.24. In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and significance of these barriers?	1,2,9, 10, 14	Not applicable.	p	p

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B.5.25. In case of applying step 3 (barrier analysis): Is it transparently shown that the execution of at least one of the alternatives is not prevented by the identified barriers?	1,2,9 ,10, 14	Not applicable.	p	p
B.5.26. Where more than one credible and plausible alternative remains, project participants shall, as a conservative assumption, use the alternative baseline scenario that results in the lowest baseline emissions as the most likely baseline scenario. Is the least emission alternative for each component of the baseline scenario identified? In assessing these scenarios, any regulatory or contractual requirements should be taken into consideration.	1,2,9 ,10, 14	<u>Corrective Action Request 14:</u> It should be demonstrated in the PDD that after application of the investment analysis only one alternative remains, namely the continuation of the current situation (passive venting system) and explain in the PDD why the project activity without being realized as a CDM project is being kicked out as alternative after the investment analysis. .	CAR 14	p
B.5.27. Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD (step 4a)?	1,2,9 ,10, 14	See B.5.28	See CAR 15	p
B.5.28. If similar activities are occurring: Is it demonstrated that in spite of these similarities the project activity would not be implemented without the CDM component (step 4b)?	1,2,9 ,10, 14	<u>Corrective Action Request 15:</u> Step 4b) should be updated, mentioning both landfills which have a forced methane extraction and destruction, using blowers, collection systems and flaring systems without being registered as CDM project as well those which were registered as CDM projects in the meanwhile.	CAR 15	p

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B.6. Emissions reductions				
<i>B.6.1. Explanation of methodological choices</i>				
B.6.1.1. Is it explained how the procedures provided in the methodology are applied by the proposed project activity?	1,2,9,10	Some steps of the “Tool to determine project emissions from flaring gases containing methane” are not mentioned in B.6.1. Corrective Action Request 16: Project participants (PPs) are requested to mention all relevant steps of the “Tool to determine project emissions from flaring gases containing methane” in B.6.1. of the PDD.	CAR 16	p
B.6.1.2. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	1,2,9,10	Yes. Every selection of options offered by the methodology is correctly justified. However, some steps of the Flaring Tool are missing. See B.6.1.1.	See CAR 16	p
B.6.1.3. Are the formulae required for the determination of project emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1,2,9,10	The formulae mentioned in the PDD are correctly presented. However, some formulae referring to the Flaring Tool are missing in the PDD. See B.6.1.1.	See CAR 16	p
B.6.1.4. At validation stage, have the methane emissions from incomplete capture of LFG been considered adequately? (in comparison to modeling of total baseline emis-	1,2,9,10	There is only considered that part of methane emissions (70 percent) which is sent to the flares and the autoclave.	p	p

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sions)				
B.6.1.5. Are the formulae required for the determination of baseline emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1,2,9,10	Yes. The formulae required for the determination of baseline emissions are correctly presented.	p	p
B.6.1.6. Are ex ante projections of the future GHG emissions of the landfill based on verifiable methods (compare e.g. IPCC 2006 / EB 26 Annex 14)?	1,2,9,10	<p>The quantity of landfill gas flared by the project is estimated ex ante using the US EPA First Order Decay Model, using L_0 (methane generation potential) and k (methane generation rate constant) values appropriate for Brazil. However the formula is not indicated.</p> <p>Corrective Action Request 17:</p> <p>The formula calculating the quantity of landfill gas flared by the project (using the US EPA First Order Decay Model) should be indicated in the PDD as well as the formula filled out with the real numbers.</p>	CAR 17	p
B.6.1.7. Does this baseline estimate description consider that some of the methane generated by the landfill may be captured and destroyed?	1,2,9,10	Yes. The baseline considers an Adjustment Factor of 20 %.	p	p
B.6.1.8. Are the requirements from the authorities on the capture and de-	1,2,9	There are no requirements from the authorities on the capture and	p	p

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struction/utilization of the gas produced in the landfill clearly defined and sustained (compare MDreg / AF – on methane destroyed under baseline)?	,10	destruction/utilization on the gas produced in the landfill.		
B.6.1.9. Is leakage discussed in line with the methodology (no consideration necessary)?	1,2,9,10	The PDD mentions that leakage does not have to be considered according to ACM0001.	p	p
B.6.1.10. Are the formulae required for the determination of emission reductions (as per methodology ACM0001, version 6) correctly presented?	1,2,9,10	<p>The parameter description of the formula for emission reduction does not mention $EL_{LFG,y}$</p> <p><u>Corrective Action Request 18:</u></p> <p>The parameter $EL_{LFG,y}$ should be described in chapter B.6.1. of the PDD.</p>	CAR 18	p

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Date of Completion: 26.05.2008

Number of Pages: 108

Report N°: 857948 - Repeat



Industrie Service

Table 1b Conformity of Project Activity and PDD (Second Global Stakeholder Consultation Process)				
CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
Tool to determine project emissions from flaring gases containing methane				
B.6.1.11. In the case of open flares: Is the correct default value for flare efficiency indicated (50 % if it can be demonstrated that the flare is operational; 0 % if the flare is not operational)?	1,2, 11	Not applicable as the project activity applies enclosed flares.	p	p
B.6.1.12. In the case of enclosed flares: which of the two options is chosen to determine flare efficiency and is this option correctly applied according to the flaring tool? a) to use a 90 % default value (manufacturer's specifications for the operation of the flare and required data and procedures to monitor these specifications should be documented in the PDD). b) Continuous monitoring of the methane destruction efficiency of the flare	1,2, 11	In the last submitted PDD it is chosen option a). This option is correctly applied according to the flaring tool.	p	p
B.6.1.13. Are steps 1-7 for the calculation of project emissions from flaring correctly applied?	1,2, 11	There are only mentioned step 1, step 5, step 6 and step 7 in the PDD. See B.6.1.15, B.6.1.16, B.6.1.17	See CAR's 19,20,21	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
<p>B.6.1.14. Step 1:</p> <p>Determination of the mass flow rate of the residual gas that is flared:</p> <p>Are the formulae required for the determination of the mass flow rate of the residual gas that is flared correctly presented, enabling a complete identification of parameter to be used and / or monitored?</p>	1,2, 11	Step 1 including its formulae is correctly presented in the PDD.	p	p
<p>B.6.1.15. Step 2:</p> <p>Determination of the mass fraction of carbon, hydrogen, oxygen and nitrogen in the residual gas</p> <p>Is the formula required for the determination of the mass fraction of carbon, hydrogen, oxygen and nitrogen in the residual gas correctly presented, enabling a complete identification of parameter to be used and / or monitored?</p>	1,2, 11	<p>Step 2 is not mentioned in the PDD.</p> <p><u>Corrective Action Request 19:</u></p> <p>Regarding Tool to determine project emissions from flaring gases containing methane: Step 2 (formula, parameters, explanation) should be mentioned in the PDD.</p>	CAR 19	p
<p>B.6.1.16. Step 3 (only applicable in case of enclosed flares and of continuous monitoring of the methane combustion efficiency):</p> <p>Determination of the volumetric flow rate of the exhaust gas on a dry basis</p> <p>Are the formulae required for the determination of the</p>	1,2, 11	<p>Step 3 is not mentioned in the PDD.</p> <p><u>Corrective Action Request 20:</u></p> <p>Regarding Tool to determine project emissions from flaring gases containing methane: Step 3 (formula, parameters, explanation) should be mentioned in the PDD.</p>	CAR 20	p

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volumetric flow rate of the exhaust gas on a dry basis correctly presented, enabling a complete identification of parameter to be used and / or monitored?				
<p>B.6.1.17. Step 4 (only applicable in case of enclosed flares and of continuous monitoring of the methane combustion efficiency):</p> <p>Determination of methane mass flow rate in the exhaust gas on a dry basis</p> <p>Is the formula required for the determination of the methane mass flow rate in the exhaust gas on a dry basis correctly presented, enabling a complete identification of parameter to be used and / or monitored?</p>	1,2, 11	<p>Step 4 is not mentioned in the PDD.</p> <p><u>Corrective Action Request 21:</u></p> <p>Regarding Tool to determine project emissions from flaring gases containing methane: Step 4 (formula, parameters, explanation) should be mentioned in the PDD.</p>	CAR 21	p
<p>B.6.1.18. Step 5:</p> <p>Determination of methane mass flow rate in the residual gas on a dry basis</p> <p>Is the formula required for the determination of the methane mass flow rate in the residual gas on a dry basis correctly presented, enabling a complete identification of parameter to be used and / or monitored?</p>	1,2, 11	Step 5 including formula, parameters and explanations is correctly presented.	p	p
<p>B.6.1.19. Step 6:</p> <p>Determination of the hourly flare efficiency</p>	1,2, 11	Step 6 including formula, parameters and explanations is correctly presented.	p	p

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Table 1b Conformity of Project Activity and PDD (Second Global Stakeholder Consultation Process)																
CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD												
Is the formula required for the determination of the hourly flare efficiency correctly presented, enabling a complete identification of parameter to be used and / or monitored?																
B.6.1.20. Step 7: Calculation of annual project emissions from flaring Is the formula required for the determination of annual project emissions from flaring correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1,2, 11	Step 7 including formula, parameters and explanations is correctly presented.	p	p												
B.6.2. Data and parameters that are available at validation																
B.6.2.1. Is the list of parameters presented in chapter B.6.2 considered to be complete with regard to the requirements of the applied methodology?	1,2,9 ,10	The list of parameters presented in chapter B.6.2. is not considered to be complete. See B.6.2.2.-6.2.31	See CAR 22 – CAR 40	p												
B.6.2.2. Parameter Title: MDproject, y - the (estimate) amount of methane to be destroyed/combusted during the year, in, tonnes of methane (tCH ₄)	1,2,9 ,10	Corrective Action Request 22: The value of the parameter MDproject, y should be indicated. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>N/A</td></tr><tr><td>Correct value provided?</td><td>No</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	N/A	Correct value provided?	No	CAR 22	p
Data Checklist	Yes / No															
Title in line with methodology?	Yes															
Data unit correctly expressed?	Yes															
Appropriate description of parameter?	Yes															
Source clearly referenced?	N/A															
Correct value provided?	No															

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD																		
		Has this value been verified?	No																				
		Choice of data correctly justified?	N/A																				
		Measurement method correctly described?	Yes																				
B.6.2.3. Parameter Title: MD _{flared, y} .(estimate) amount of methane destroyed in flare	1,2,9 ,10	<u>Corrective Action Request 23:</u> The value of the parameter MD _{flared, y} should be indicated. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>N/A</td></tr><tr><td>Correct value provided?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Choice of data correctly justified?</td><td>N/A</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table> Consider: <ul style="list-style-type: none">- GWP: 21- D_{CH4} - Standard methane density at 0°C and 1,013bar: 0,0007168tCH4 / m3CH4		Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	N/A	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	N/A	Measurement method correctly described?	Yes	CAR 23	p
Data Checklist	Yes / No																						
Title in line with methodology?	Yes																						
Data unit correctly expressed?	Yes																						
Appropriate description of parameter?	Yes																						
Source clearly referenced?	N/A																						
Correct value provided?	No																						
Has this value been verified?	No																						
Choice of data correctly justified?	N/A																						
Measurement method correctly described?	Yes																						
B.6.2.4. Parameter Title: LFG _{flare, y} – (estimate) Amount of LFG to be fed to flare	1,2,9 ,10	<u>Corrective Action Request 24:</u> The parameter LFG _{flare, y} – (estimate) Amount of LFG to be fed to flare should be indicated in B.6.2. with all its necessary explanations.		CAR 24	p																		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
		<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?			
Data Checklist	Yes / No																					
Title in line with methodology?																						
Data unit correctly expressed?																						
Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						
Has this value been verified?																						
Choice of data correctly justified?																						
Measurement method correctly described?																						
B.6.2.5. Parameter Title: PEflare, y - Project Emission from flaring of the residual gas stream in line with expected flare efficiency (flaring tool) and technical design of flare (estimate).	1,2,9,10	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>N/A</td></tr><tr><td>Correct value provided?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Choice of data correctly justified?</td><td>N/A</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table> <p>Corrective Action Request 25: The value of the parameter PEflare, y should be indicated.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	N/A	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	N/A	Measurement method correctly described?	Yes	CAR 25	p
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	N/A																					
Correct value provided?	No																					
Has this value been verified?	No																					
Choice of data correctly justified?	N/A																					
Measurement method correctly described?	Yes																					

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
B.6.2.6. Parameter Title: W _{CH4, y} – (estimate) average methane content in LFG over time	1,2,9,10	<p>Corrective Action Request 26: The parameter W_{CH4, y} – (estimate) average methane content in LFG over time should be indicated in B.6.2. with all its necessary explanations.</p> <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		CAR 26	p
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?																						
Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						
Has this value been verified?																						
Choice of data correctly justified?																						
Measurement method correctly described?																						
B.6.2.7. Parameter Title: MDelectricity, y.(estimate) amount of methane destroyed in generator	1,2,9,10	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>N/A</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>N/A</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	N/A	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	N/A	Measurement method correctly described?	Yes	p	p
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	N/A																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	N/A																					
Measurement method correctly described?	Yes																					

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
B.6.2.8. Parameter Title: LFGelectricity,y – (estimate) Amount of LFG to be fed to generator	1,2,9 ,10	Not applicable. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		p	p
Data Checklist	Yes / No																					
Title in line with methodology?																						
Data unit correctly expressed?																						
Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						
Has this value been verified?																						
Choice of data correctly justified?																						
Measurement method correctly described?																						
B.6.2.9. Parameter Title: MDthermal, y.(estimate) amount of methane destroyed in boiler	1,2,9 ,10	<u>Corrective Action Request 27:</u> The value of the parameter MDthermal,y should be indicated. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>N/A</td></tr><tr><td>Correct value provided?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Choice of data correctly justified?</td><td>N/A</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	N/A	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	N/A	Measurement method correctly described?	Yes	CAR 27	p
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	N/A																					
Correct value provided?	No																					
Has this value been verified?	No																					
Choice of data correctly justified?	N/A																					
Measurement method correctly described?	Yes																					

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
B.6.2.10. Parameter Title: LFGthermal,y – (estimate) Amount of LFG to be fed to boiler	1,2,9 ,10	<p><u>Corrective Action Request 28:</u> The parameter LFGthermal,y – (estimate) Amount of LFG to be fed to boiler should be indicated in B.6.2. with all its necessary explanations.</p> <table><tr><td>Data Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		CAR 28	p
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?																						
Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						
Has this value been verified?																						
Choice of data correctly justified?																						
Measurement method correctly described?																						
B.6.2.11. Parameter Title: MDreg, y - the amount of methane that would have been de- stroyed/combusted during the year in the absence of the project, in, tonnes of methane (tCH ₄)	1,2,9 ,10	<p><u>Corrective Action Request 29:</u> The value of the parameter MDreg, y should be indicated.</p> <table><tr><td>Data Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>N/A</td></tr><tr><td>Correct value provided?</td><td>No</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	N/A	Correct value provided?	No	CAR 29	p						
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	N/A																					
Correct value provided?	No																					

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		<table><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Choice of data correctly justified?</td><td>N/A</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table> <p>Parameter relevant for verification.</p>		Has this value been verified?	No	Choice of data correctly justified?	N/A	Measurement method correctly described?	Yes														
Has this value been verified?	No																						
Choice of data correctly justified?	N/A																						
Measurement method correctly described?	Yes																						
B.6.2.12. AF – Adjustment factor, in absence of MD reg to reflect on project context	1,2,9,10	<p>Corrective Action Request 30: The parameter AF – Adjustment factor should be indicated in B.6.2. with all its necessary explanations.</p> <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table> <p>Example AF:</p> <ul style="list-style-type: none">- In cases where a specific system for collection and destruction of methane is mandated by regulatory or contractual requirements, the ratio of the destruction efficiency of that system to the destruction efficiency of the system used in the project activity shall be used. <p>In cases where a specific percentage of the “generated” amount of methane to be collected and destroyed is specified in the contract or mandated by regulations, this percentage divided by an assumed efficiency for the collection and destruction system used in the project activity shall be used.</p>		Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		CAR 30	p
Data Checklist	Yes / No																						
Title in line with methodology?	No																						
Data unit correctly expressed?																							
Appropriate description of parameter?																							
Source clearly referenced?																							
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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
B.6.2.13. Parameter Title: EL _{LFG,y} : net quantity of electricity produced using LFG, which in the absence of the project activity would have been produced by power plants connected to the grid or by an on-site/off-site fossil fuel based captive power generation, during year y, in megawatt hours (MWh)	1,2,9,10	Not applicable. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		p	p
Data Checklist	Yes / No																					
Title in line with methodology?																						
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Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						
Has this value been verified?																						
Choice of data correctly justified?																						
Measurement method correctly described?																						
B.6.2.14. Parameter Title: CEF _{electricity, BLy} : CO2 emissions intensity of the baseline source of electricity displaced, in tCO2e/MWh.	1,2,9,10	Not applicable. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	Yes	Appropriate description of parameter?	No	Source clearly referenced?	Yes	Correct value provided?	No	Has this value been verified?	Yes	Choice of data correctly justified?	No	Measurement method correctly described?	No	p	p
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	No																					
Source clearly referenced?	Yes																					
Correct value provided?	No																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	No																					
Measurement method correctly described?	No																					

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
B.6.2.15. Parameter Title: EF _{fuel,BL} : emission factor of baseline fossil fuel used, as identified in the baseline scenario identification procedure, expressed in tCO2/mass of volume unit.	1,2,9,10	Corrective Action Request 31: The parameter “EF _{fuel,BL} : emission factor of baseline fossil fuel used, as identified in the baseline scenario identification procedure” should be mentioned in B.6.2. with all its necessary explanations. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		CAR 31	p
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?																						
Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						
Has this value been verified?																						
Choice of data correctly justified?																						
Measurement method correctly described?																						
B.6.2.16. Parameter Title: NCV _{fuel,BL} : Net calorific value of fuel, as identified through the baseline identification procedure, in GJ per unit of volume or mass	1,2,9,10	Corrective Action Request 32: The parameter “NCV _{fuel,BL} : Net calorific value of fuel, as identified through the baseline identification procedure” should be mentioned in B.6.2. with all its necessary explanations. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		CAR 32	p				
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?																						
Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						
Has this value been verified?																						

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS			PPD in GSP	Final PDD																		
		Choice of data correctly justified?																						
		Measurement method correctly described?																						
B.6.2.17. Parameter Title: • _{gen,BL} : efficiency of baseline power generation plant.	1,2,9 ,10	Not applicable. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>			Data Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		p	p
Data Checklist	Yes / No																							
Title in line with methodology?																								
Data unit correctly expressed?																								
Appropriate description of parameter?																								
Source clearly referenced?																								
Correct value provided?																								
Has this value been verified?																								
Choice of data correctly justified?																								
Measurement method correctly described?																								
B.6.2.18. Parameter Title: ET _{LFG,y} – the quantity of thermal energy produced utilizing the landfill gas, which in the absence of the project activity would have been produced from onsite/offsite fossil fuel fired boiler, during the year y in TJ.	1,2,9 ,10	<u>Corrective Action Request 33:</u> The parameter “ET _{LFG,y} – the quantity of thermal energy produced utilizing the landfill gas, which in the absence of the project activity would have been produced from onsite/offsite fossil fuel fired boiler, during the year y” should be mentioned in B.6.2. with all its necessary explanations. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr></table>			Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		CAR 33	p						
Data Checklist	Yes / No																							
Title in line with methodology?	No																							
Data unit correctly expressed?																								
Appropriate description of parameter?																								
Source clearly referenced?																								
Correct value provided?																								

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		Has this value been verified?			
		Choice of data correctly justified?			
		Measurement method correctly described?			
B.6.2.19. Parameter Title: CEF _{thermal,BL,y} – Carbon emission factor of thermal energy	1,2,9 ,10	<u>Corrective Action Request 34:</u> Regarding the parameter CEF _{thermal,BL,y} – Carbon emission factor of thermal energy: The parameter specifications, which refer to CEF _{thermal,BL,y} in the PDD are not correct. The specifications belong to parameter EF _{fuel,BL} . The parameter CEF _{thermal,BL,y} – Carbon emission factor of thermal energy with all its explanations should be revised.		CAR 34	p
		Data Checklist	Yes / No		
		Title in line with methodology?	No		
		Data unit correctly expressed?	No		
		Appropriate description of parameter?	No		
		Source clearly referenced?	No		
		Correct value provided?	No		
		Has this value been verified?	No		
		Choice of data correctly justified?	No		
		Measurement method correctly described?	No		
B.6.2.20. Parameter Title:	1,2,9	<u>Corrective Action Request 35:</u>		CAR	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
EF _{fuel,BL} : Emission factor of the fuel, as identified through the baseline identification procedure, used in the boiler to generate the thermal energy in the absence of the project activity in tCO2/unit of volume or mass of the fuel.	,10	<div>The parameter EF_{fuel,BL}: Emission factor of the fuel, as identified through the baseline identification procedure, used in the boiler to generate the thermal energy in the absence of the project activity” should be mentioned in B.6.2. of the PDD with all its necessary explanations.</div> <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		35	
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?																						
Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						
Has this value been verified?																						
Choice of data correctly justified?																						
Measurement method correctly described?																						
B.6.2.21. Parameter Title: NCV _{fuel,BL} : Net calorific value of fuel, as identified through the baseline identification procedure, used in the boiler to generate the thermal energy in the absence of the project activity in TJ per unit of volume or mass	1,2,9 ,10	<div>Corrective Action Request 36:</div> <div>The parameter NCV_{fuel,BL}: Net calorific value of fuel, as identified through the baseline identification procedure, used in the boiler to generate the thermal energy in the absence of the project activity “ should be mentioned in B.6.2. of the PDD with all its necessary explanations.</div> <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		CAR 36	p						
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?																						
Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						

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		Has this value been verified?				
		Choice of data correctly justified?				
		Measurement method correctly described?				
B.6.2.22. Parameter Title: • _{boiler} : energy efficiency of the boiler used in the absence of the project activity to generate the thermal energy	1,2,9,10	Corrective Action Request 37: The parameter “• _{boiler} : energy efficiency of the boiler used in the absence of the project activity to generate the thermal energy” should be indicated in B.6.2. of the PDD with all its necessary explanations.			CAR 37	p
		Data Checklist	Yes / No			
		Title in line with methodology?				
		Data unit correctly expressed?				
		Appropriate description of parameter?				
		Source clearly referenced?				
		Correct value provided?				
		Has this value been verified?				
		Choice of data correctly justified?				
		Measurement method correctly described?				
B.6.2.23. Parameter Title: EL _{PR,y} : amount of electricity generated in an on-site fossil fuel fired power plant or imported from the grid as a result of the project activity, measured using an electricity meter (MWh).	1,2,9,10	Corrective Action Request 38: The parameter “EL _{PR,y} : amount of electricity generated in an on-site fossil fuel fired power plant or imported from the grid as a result of the project activity, measured using an electricity meter (MWh)” should be indicated in B.6.2. of the PDD with all its necessary explanations.			CAR 38	p
		Data Checklist	Yes / No			

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD
		Title in line with methodology?	No		
		Data unit correctly expressed?			
		Appropriate description of parameter?			
		Source clearly referenced?			
		Correct value provided?			
		Has this value been verified?			
		Choice of data correctly justified?			
		Measurement method correctly described?			
B.6.2.24. Parameter Title: CEF _{elec.,y,PR,y} : carbon emissions factor of electricity	1,2,9 ,10	Corrective Action Request 39: Regarding the parameter CEF _{elec.,y,PR,y} : carbon emissions factor of electricity: Title, description, value and measurement method should be re-vised or indicated (in B.6.2.).		CAR 39	p
		Data Checklist	Yes / No		
		Title in line with methodology?	No		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	No		
		Source clearly referenced?	Yes		
		Correct value provided?	No		
		Has this value been verified?	Yes		
		Choice of data correctly justified?	No		
		Measurement method correctly described?	No		
B.6.2.25. Parameter title: EF _{fuel,PR} : emission factor of fossil fuel used	1,2,9 ,10	Not applicable.		p	p
		Data Checklist	Yes / No		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD
in captive power plant expressed in tCO ₂ /unit volume or mass unit		Title in line with methodology?			
		Data unit correctly expressed?			
		Appropriate description of parameter?			
		Source clearly referenced?			
		Correct value provided?			
		Has this value been verified?			
		Choice of data correctly justified?			
		Measurement method correctly described?			
B.6.2.26. Parameter Title: NCV _{fuel,PR} : net caloric value of the fossil fuel (TJ/per unit volume of mass unit)	1,2,9 ,10	Not applicable.		p	p
		Data Checklist	Yes / No		
		Title in line with methodology?			
		Data unit correctly expressed?			
		Appropriate description of parameter?			
		Source clearly referenced?			
		Correct value provided?			
		Has this value been verified?			
		Choice of data correctly justified?			
		Measurement method correctly described?			
B.6.2.27. Parameter Title: • _{gen,PR} : efficiency of captive power generation plant.	1,2,9 ,10	Not applicable.		p	p
		Data Checklist	Yes / No		
		Title in line with methodology?			
		Data unit correctly expressed?			
		Appropriate description of parameter?			
		Source clearly referenced?			
		Correct value provided?			

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS			PPD in GSP	Final PDD
		Has this value been verified?				
		Choice of data correctly justified?				
		Measurement method correctly described?				
B.6.2.28. Parameter Title: ET _{PR,y} : fossil fuel consumption on site during project activity in year y (tonne)	1,2,9 ,10	Not applicable.			p	p
		Data Checklist	Yes / No			
		Title in line with methodology?				
		Data unit correctly expressed?				
		Appropriate description of parameter?				
		Source clearly referenced?				
		Correct value provided?				
		Has this value been verified?				
		Choice of data correctly justified?				
		Measurement method correctly described?				
B.6.2.29. Parameter Title: EF _{fuel,PR,y} : CO2 emissions factor of the fossil fuel used by boiler to generate thermal energy in the project activity during year y.	1,2,9 ,10	Not applicable.			p	p
		Data Checklist	Yes / No			
		Title in line with methodology?				
		Data unit correctly expressed?				
		Appropriate description of parameter?				
		Source clearly referenced?				
		Correct value provided?				
		Has this value been verified?				
		Choice of data correctly justified?				
		Measurement method correctly described?				
B.6.2.30. Parameter Title: GWP _{CH4} - Global Warming Potential value	1,2,9 ,10	<u>Corrective Action Request 40:</u> Regarding parameter GWP _{CH4} - Global Warming Potential value			CAR 40	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
for methane for the first commitment period is 21 tCO ₂ e/tCH ₄ (estimate)		<div>for methane for the first commitment period is 21 tCO₂e/tCH₄ (estimate): Description and justification of choice of data should be revised.</div> <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>N/A</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	No	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	No	Measurement method correctly described?	N/A		
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	No																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	No																					
Measurement method correctly described?	N/A																					
B.6.2.31. Parameter Title: D _{CH4} : Methane density expressed in tonnes of methane per cubic meter of methane.	1,2,9,10	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	p	p
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	Yes																					
Parameters / data on baseline emissions can be defined according to FOD model.																						

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
In the following typical parameters are included in line with EB 26, Annex 14: Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site. The use of the tool is not obligatory but would reflect good practice.																						
B.6.2.32. Parameter Title: <ul style="list-style-type: none">- Model correction factor to account for model uncertainties	1,2,9,10	<div>Not applicable.<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table></div>	Data Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		p	p
Data Checklist	Yes / No																					
Title in line with methodology?																						
Data unit correctly expressed?																						
Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						
Has this value been verified?																						
Choice of data correctly justified?																						
Measurement method correctly described?																						
B.6.2.33. Parameter Title: OX - Oxidation factor	1,2,9,10	<div>Not applicable.<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr></table></div>	Data Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		p	p		
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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD																		
		Measurement method correctly described? <div></div>																					
B.6.2.34. Parameter Title: MCF - Methane correction factor	1,2,9 ,10	Not applicable. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>		Data Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		p	p
Data Checklist	Yes / No																						
Title in line with methodology?																							
Data unit correctly expressed?																							
Appropriate description of parameter?																							
Source clearly referenced?																							
Correct value provided?																							
Has this value been verified?																							
Choice of data correctly justified?																							
Measurement method correctly described?																							
B.6.2.35. Parameter Title DOCf Fraction of degradable organic carbon that can decompose	1,2,9 ,10	Not applicable. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>		Data Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		p	p
Data Checklist	Yes / No																						
Title in line with methodology?																							
Data unit correctly expressed?																							
Appropriate description of parameter?																							
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Correct value provided?																							
Has this value been verified?																							
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Measurement method correctly described?																							

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
B.6.2.36. Parameter Title DOCj Fraction of degradable organic carbon by weight	1,2,9 ,10	<div>Not applicable.</div> <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		p	p
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Title in line with methodology?																						
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Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						
Has this value been verified?																						
Choice of data correctly justified?																						
Measurement method correctly described?																						
B.6.2.37. Parameter Title: Kj, - Decay rate for the waste type j	1,2,9 ,10	<div>Not applicable.</div> <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		p	p
Data Checklist	Yes / No																					
Title in line with methodology?																						
Data unit correctly expressed?																						
Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						
Has this value been verified?																						
Choice of data correctly justified?																						
Measurement method correctly described?																						
B.6.2.38. Parameter Title:	1,2,9	Not applicable.	p	p																		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
F, Fraction of methane in the SWDS gas	,10			
<i>B.6.3. Ex-ante calculation of emission reductions</i>				
B.6.3.1. Is the projection based on the same procedures as used for future monitoring?	1,2,9 ,10	The projection is based on the same procedures as used for future monitoring.	p	p
B.6.3.2. Are the GHG calculations documented in a complete and transparent manner?	1,2,9 ,10	The GHG calculations are not documented in a complete and transparent manner. <u>Corrective Action Request 41:</u> The formulae for the ex-ante calculation of emission reductions have to be filled out with the real numbers. Only like that it is possible for any reader to retrace how the final figures were calculated.	CAR 41	p
B.6.3.3. Is the data provided in this section consistent with data as presented in other chapters of the PDD?	1,2,9 ,10	It is not possible for the validation team to evaluate the data provided in this and the other chapters of the PDD, as the baseline and project emission calculation sheet has not been submitted to the validation team so far. <u>Corrective Action Request 42:</u> In order to evaluate whether data provided in this and other chapters are correct and consistent, PPs are requested to submit the baseline and project emission calculation sheet to the validation team.	CAR 42	p
<i>B.6.4. Summary of the ex-ante estimation of emission reductions</i>				
B.6.4.1. Will the project result in fewer GHG emissions than the baseline	1,2	Yes. The project will result in fewer GHG emissions than the baseline scenario.	p	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
scenario?				
B.6.4.2. Is the form/table required for the indication of projected emission reductions correctly applied?	1,2	The form required for the indication of projected emission reductions is correctly applied.	p	p
B.6.4.3. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	1,2	See A.4.3.10.	See CAR 6	p
B.6.4.4. Is the data provided in this section in consistency with data as presented in other chapters of the PDD?	1,2	See B.6.3.3.	See CAR 42	p
B.7. Application of the monitoring methodology and description of the monitoring plan				
<i>B.7.1. Data and parameters monitored</i>				
B.7.1.1. Is the list of parameters presented in chapter B.7.1 considered to be complete with regard to the requirements of the applied methodology?	1,2,9,10	The list of parameters presented in chapter B.7.1. is not considered to be complete. See B.7.1.2.- B.7.1.35.	See CAR 43 – CAR 59	p
B.7.1.2. Parameter Title: LFG total,y - Total amount of landfill gas captured	1,2,9,10	<u>Corrective Action Request 43:</u> The value should be provided for the parameter LFG total,y - Total amount of landfill gas captured.	CAR 43	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD
		Monitoring Checklist	Yes / No		
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	Yes		
		Correct value provided for estimation?	No		
		Has this value been verified?	No		
		Measurement method correctly described?	Yes		
		Correct reference to standards?	Yes		
		Indication of accuracy provided?	Yes		
		QA/QC procedures described?	Yes		
		QA/QC procedures appropriate?	Yes		
		B.7.1.3. Parameter Title: LFG flare, y - Amount of landfill gas flared	1,2,9 ,10		
		Monitoring Checklist	Yes / No		
		Title in line with methodology?	Yes		

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Data unit correctly expressed?	Yes																												
Appropriate description of parameter?	No																												
Source clearly referenced?	Yes																												
Correct value provided for estimation?	No																												
Has this value been verified?	No																												
Measurement method correctly described?	No																												
Correct reference to standards?	Yes																												
Indication of accuracy provided?	Yes																												
QA/QC procedures described?	Yes																												
QA/QC procedures appropriate?	Yes																												
B.7.1.4. Parameter Title: LFGelectricity, y - Amount of landfill gas combusted in power plant.	1,2,9,10	Not applicable. <table><tr><td>Monitoring Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided for estimation?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr><tr><td>Correct reference to standards?</td><td></td></tr><tr><td>Indication of accuracy provided?</td><td></td></tr><tr><td>QA/QC procedures described?</td><td></td></tr><tr><td>QA/QC procedures appropriate?</td><td></td></tr></table>		Monitoring Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided for estimation?		Has this value been verified?		Measurement method correctly described?		Correct reference to standards?		Indication of accuracy provided?		QA/QC procedures described?		QA/QC procedures appropriate?		p	p
Monitoring Checklist	Yes / No																												
Title in line with methodology?																													
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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																								
B.7.1.5. Parameter Title: LFGthermal, y - Amount of methane combusted in boiler.	1,2,9 ,10	<u>Corrective Action Request 45:</u> Regarding the parameter LFG thermal,y – Amount of methane combusted in the autoclave -Value should be indicated. -The measurement method is not completely correctly indicated. <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>Yes</td></tr><tr><td>Indication of accuracy provided?</td><td>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	No	Has this value been verified?	No	Measurement method correctly described?	No	Correct reference to standards?	Yes	Indication of accuracy provided?	Yes	QA/QC procedures described?	Yes	QA/QC procedures appropriate?	Yes	CAR 45	p
Monitoring Checklist	Yes / No																											
Title in line with methodology?	Yes																											
Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	Yes																											
Source clearly referenced?	Yes																											
Correct value provided for estimation?	No																											
Has this value been verified?	No																											
Measurement method correctly described?	No																											
Correct reference to standards?	Yes																											
Indication of accuracy provided?	Yes																											
QA/QC procedures described?	Yes																											
QA/QC procedures appropriate?	Yes																											
B.7.1.6. Parameter Title: PEflare, y - Project Emissions from flaring of the residual gas stream in	1,2,9 ,10	<u>Corrective Action Request 46 :</u> Regarding the parameter PEflare, y - Project Emissions from flar-ing of the residual gas stream in year y:	CAR 46	p																								

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																								
year y		<div>-Value should be indicated.</div> <div>-The measurement method is not completely correctly indicated.</div> <div>-QA/QC measures should be kept in general, referring to the Flaring Tool.</div> <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>Yes</td></tr><tr><td>Indication of accuracy provided?</td><td>N/A</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	No	Has this value been verified?	No	Measurement method correctly described?	No	Correct reference to standards?	Yes	Indication of accuracy provided?	N/A	QA/QC procedures described?	No	QA/QC procedures appropriate?	No		
Monitoring Checklist	Yes / No																											
Title in line with methodology?	Yes																											
Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	Yes																											
Source clearly referenced?	Yes																											
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Has this value been verified?	No																											
Measurement method correctly described?	No																											
Correct reference to standards?	Yes																											
Indication of accuracy provided?	N/A																											
QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											
B.7.1.7. Parameter Title: W _{CH4,y} - Methane fraction in the landfill gas	1,2,9 ,10	<div>Clarification Request 12:</div> <div>PPs should inform where the value of 50 % comes from.</div> <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	CR 12	p																		
Monitoring Checklist	Yes / No																											
Title in line with methodology?	Yes																											
Data unit correctly expressed?	Yes																											

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		Appropriate description of parameter?	Yes		
		Source clearly referenced?	Yes		
		Correct value provided for estimation?	CR		
		Has this value been verified?	CR		
		Measurement method correctly described?	Yes		
		Correct reference to standards?	Yes		
		Indication of accuracy provided?	Yes		
		QA/QC procedures described?	Yes		
		QA/QC procedures appropriate?	Yes		
B.7.1.8. Parameter Title: T- Temperature of the landfill gas	1,2,9 ,10	<u>Corrective Action Request 47:</u> Regarding the parameter T- Temperature of the landfill gas: The value should be indicated.		CAR 47	p
		Monitoring Checklist	Yes / No		
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	Yes		
		Correct value provided for estimation?	No		
		Has this value been verified?	No		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD																								
		Measurement method correctly described?	Yes																										
		Correct reference to standards?	Yes																										
		Indication of accuracy provided?	Yes																										
		QA/QC procedures described?	Yes																										
		QA/QC procedures appropriate?	Yes																										
B.7.1.9. Parameter Title: p - Pressure of the landfill gas	1,2,9 ,10	<u>Corrective Action Request 48:</u> Regarding the parameter p – Pressure of the landfill gas: The value should be indicated and the data unit should be indicated as per methodology ACM0001. <table><tr><td>Monitoring Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr><tr><td>Correct reference to standards?</td><td>Yes</td></tr><tr><td>Indication of accuracy provided?</td><td>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>		Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	No	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	No	Has this value been verified?	No	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	Yes	QA/QC procedures described?	Yes	QA/QC procedures appropriate?	Yes	CAR 48	p
Monitoring Checklist	Yes / No																												
Title in line with methodology?	Yes																												
Data unit correctly expressed?	No																												
Appropriate description of parameter?	Yes																												
Source clearly referenced?	Yes																												
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QA/QC procedures described?	Yes																												
QA/QC procedures appropriate?	Yes																												

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																								
B.7.1.10. Parameter Title: EL _{LFG} - Net amount of electricity generated using LFG.	1,2,9,10	<div><div>Not applicable.</div><table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided for estimation?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr><tr><td>Correct reference to standards?</td><td></td></tr><tr><td>Indication of accuracy provided?</td><td></td></tr><tr><td>QA/QC procedures described?</td><td></td></tr><tr><td>QA/QC procedures appropriate?</td><td></td></tr></table></div>	Monitoring Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided for estimation?		Has this value been verified?		Measurement method correctly described?		Correct reference to standards?		Indication of accuracy provided?		QA/QC procedures described?		QA/QC procedures appropriate?		p	p
Monitoring Checklist	Yes / No																											
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QA/QC procedures described?																												
QA/QC procedures appropriate?																												
B.7.1.11. Parameter Title: EL _{PR} - Total amount of electricity required to meet project requirement.	1,2,9,10	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr><tr><td>Correct reference to standards?</td><td>Yes</td></tr><tr><td>Indication of accuracy provided?</td><td>Yes</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	Yes	Has this value been verified?	Yes	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	Yes	p	p				
Monitoring Checklist	Yes / No																											
Title in line with methodology?	Yes																											
Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	Yes																											
Source clearly referenced?	Yes																											
Correct value provided for estimation?	Yes																											
Has this value been verified?	Yes																											
Measurement method correctly described?	Yes																											
Correct reference to standards?	Yes																											
Indication of accuracy provided?	Yes																											

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		QA/QC procedures described?	Yes		
		QA/QC procedures appropriate?	Yes		
B.7.1.12. Parameter Title: ET _{LFG} – Total amount of thermal energy generated using LFG	1,2,9 ,10	Monitoring Checklist	Yes / No	p	p
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	Yes		
		Correct value provided for estimation?	Yes		
		Has this value been verified?	Yes		
		Measurement method correctly described?	Yes		
		Correct reference to standards?	Yes		
		Indication of accuracy provided?	Yes		
		QA/QC procedures described?	Yes		
		QA/QC procedures appropriate?	Yes		
B.7.1.13. Parameter Title: ET _{PR} – Total amount of fossil fuel required to meet project requirement	1,2,9 ,10	Monitoring Checklist	Yes / No	p	p
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	Yes		
		Correct value provided for estimation?	Yes		
		Has this value been verified?	Yes		
		Measurement method correctly described?	Yes		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS			PPD in GSP	Final PDD																								
		Correct reference to standards?	Yes																											
		Indication of accuracy provided?	Yes																											
		QA/QC procedures described?	Yes																											
		QA/QC procedures appropriate?	Yes																											
B.7.1.14. Parameter Title: CEF _{elec,BL} – Carbon emission factor of electricity	1,2,9 ,10	Not applicable. <table><tr><td>Monitoring Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided for estimation?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr><tr><td>Correct reference to standards?</td><td></td></tr><tr><td>Indication of accuracy provided?</td><td></td></tr><tr><td>QA/QC procedures described?</td><td></td></tr><tr><td>QA/QC procedures appropriate?</td><td></td></tr></table>			Monitoring Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided for estimation?		Has this value been verified?		Measurement method correctly described?		Correct reference to standards?		Indication of accuracy provided?		QA/QC procedures described?		QA/QC procedures appropriate?		p	p
Monitoring Checklist	Yes / No																													
Title in line with methodology?																														
Data unit correctly expressed?																														
Appropriate description of parameter?																														
Source clearly referenced?																														
Correct value provided for estimation?																														
Has this value been verified?																														
Measurement method correctly described?																														
Correct reference to standards?																														
Indication of accuracy provided?																														
QA/QC procedures described?																														
QA/QC procedures appropriate?																														
B.7.1.15. Parameter Title: EF _{fuel,BL} : - CO2 emission factor of fossil fuel	1,2,9 ,10	Corrective Action Request 49: Regarding parameter EF _{fuel,BL} : - CO2 emission factor of fossil fuel: -The description should refer to the fossil fuel used in the BL, namely diesel oil. -The source of data should be indicated in detail including volume, chapter and page of the 2006 IPCC Guidelines. Only like that it is possible for any reader to retrace whether the indicated value is correct. <table><tr><td>Monitoring Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr></table>			Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	CAR 49	p																				
Monitoring Checklist	Yes / No																													
Title in line with methodology?	Yes																													

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		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	No		
		Source clearly referenced?	No		
		Correct value provided for estimation?	CAR 48		
		Has this value been verified?	No		
		Measurement method correctly described?	Yes		
		Correct reference to standards?	Yes		
		Indication of accuracy provided?	Yes		
		QA/QC procedures described?	Yes		
		QA/QC procedures appropriate?	Yes		
B.7.1.16. Parameter Title: NCV _{fuel,BL} – Net calorific value of fossil fuel	1,2,9 ,10	Corrective Action Request 50: Regarding parameter NCV _{fuel,BL} – Net calorific value of fossil fuel: -The description is not correct and besides it should refer to the fossil fuel used in the BL, namely diesel oil. - The source of data should be indicated in detail including volume, chapter and page of the 2006 IPCC Guidelines. Only like that it is possible for any reader to retrace whether the indicated value is correct.			CAR 50
		Monitoring Checklist	Yes / No		
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	No		
		Source clearly referenced?	No		
		Correct value provided for estimation?	CAR 49		
		Has this value been verified?	No		
		Measurement method correctly described?	Yes		

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		Correct reference to standards?	Yes		
		Indication of accuracy provided?	Yes		
		QA/QC procedures described?	Yes		
		QA/QC procedures appropriate?	Yes		
B.7.1.17. Parameter Title: • _{gen,BL} – efficiency	1,2,9 ,10	Not applicable.			p
		Monitoring Checklist	Yes / No		
		Title in line with methodology?			
		Data unit correctly expressed?			
		Appropriate description of parameter?			
		Source clearly referenced?			
		Correct value provided for estimation?			
		Has this value been verified?			
		Measurement method correctly described?			
		Correct reference to standards?			
		Indication of accuracy provided?			
		QA/QC procedures described?			
		QA/QC procedures appropriate?			
B.7.1.18. Parameter Title: CEF _{ther,BL,y} – Carbon emission factor of thermal energy	1,2,9 ,10	Corrective Action Request 51: Regarding the parameter CEF _{thermal,BL,y} – Carbon emission factor of thermal energy: The parameter specifications, which refer to CEF _{thermal,BL,y} in the PDD are not correct. The specifications belong to parameter EF-fuel,BL. The parameter CEF _{thermal,BL,y} – Carbon emission factor of thermal energy with all its explanations should be revised.			CAR 51
		Monitoring Checklist	Yes / No		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD
		Title in line with methodology?	No		
		Data unit correctly expressed?	No		
		Appropriate description of parameter?	No		
		Source clearly referenced?	No		
		Correct value provided for estimation?	No		
		Has this value been verified?	No		
		Measurement method correctly described?	No		
		Correct reference to standards?	No		
		Indication of accuracy provided?	No		
		QA/QC procedures described?	No		
		QA/QC procedures appropriate?	No		
B.7.1.19. Parameter Title: •boiler - efficiency	1,2,9 ,10	Monitoring Checklist	Yes / No	p	p
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	Yes		
		Correct value provided for estimation?	Yes		
		Has this value been verified?	Yes		
		Measurement method correctly described?	Yes		
		Correct reference to standards?	Yes		
		Indication of accuracy provided?	Yes		
		QA/QC procedures described?	Yes		
		QA/QC procedures appropriate?	Yes		
B.7.1.20. Parameter Title: CE _{elec,y,PR,y} – Carbon emission factor of	1,2,9 ,10	Corrective Action Request 52: Regarding parameter CE _{elec,y,PR,y} – Carbon emission factor of		CAR 52	p

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Table 1b Conformity of Project Activity and PDD (Second Global Stakeholder Consultation Process)																												
CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																								
electricity		<div>electricity: The title, description, value and measurement method should be corrected.</div> <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>Yes</td></tr><tr><td>Indication of accuracy provided?</td><td>N/A</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	Yes	Appropriate description of parameter?	No	Source clearly referenced?	Yes	Correct value provided for estimation?	No	Has this value been verified?	Yes	Measurement method correctly described?	No	Correct reference to standards?	Yes	Indication of accuracy provided?	N/A	QA/QC procedures described?	Yes	QA/QC procedures appropriate?	Yes		
Monitoring Checklist	Yes / No																											
Title in line with methodology?	No																											
Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	No																											
Source clearly referenced?	Yes																											
Correct value provided for estimation?	No																											
Has this value been verified?	Yes																											
Measurement method correctly described?	No																											
Correct reference to standards?	Yes																											
Indication of accuracy provided?	N/A																											
QA/QC procedures described?	Yes																											
QA/QC procedures appropriate?	Yes																											
B.7.1.21. Parameter Title: EF _{fuel,PR} – CO2 emission factor of fossil fuel	1,2,9 ,10	<div>Not applicable</div> <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided for estimation?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr><tr><td>Correct reference to standards?</td><td></td></tr><tr><td>Indication of accuracy provided?</td><td></td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided for estimation?		Has this value been verified?		Measurement method correctly described?		Correct reference to standards?		Indication of accuracy provided?		p	p				
Monitoring Checklist	Yes / No																											
Title in line with methodology?																												
Data unit correctly expressed?																												
Appropriate description of parameter?																												
Source clearly referenced?																												
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		QA/QC procedures described?				
		QA/QC procedures appropriate?				
B.7.1.22. Parameter Title: NCV _{fuel,PR} – Net calorific value of fossil fuel	1,2,9 ,10	Not applicable			p	p
		Monitoring Checklist	Yes / No			
		Title in line with methodology?				
		Data unit correctly expressed?				
		Appropriate description of parameter?				
		Source clearly referenced?				
		Correct value provided for estimation?				
		Has this value been verified?				
		Measurement method correctly described?				
		Correct reference to standards?				
		Indication of accuracy provided?				
		QA/QC procedures described?				
		QA/QC procedures appropriate?				
B.7.1.23. Parameter Title: ET _y , Thermal Energy used in landfill during project	1,2,9 ,10	Not applicable.			p	p
		Monitoring Checklist	Yes / No			
		Title in line with methodology?				
		Data unit correctly expressed?				
		Appropriate description of parameter?				
		Source clearly referenced?				
		Correct value provided for estimation?				
		Has this value been verified?				
		Measurement method correctly described?				
		Correct reference to standards?				
		Indication of accuracy provided?				

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD																								
		QA/QC procedures described?																											
		QA/QC procedures appropriate?																											
B.7.1.24. Parameter Title: CEF thermal,y – CO2 emission intensity of the thermal energy.	1,2,9 ,10	Not applicable. <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided for estimation?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr><tr><td>Correct reference to standards?</td><td></td></tr><tr><td>Indication of accuracy provided?</td><td></td></tr><tr><td>QA/QC procedures described?</td><td></td></tr><tr><td>QA/QC procedures appropriate?</td><td></td></tr></table>		Monitoring Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided for estimation?		Has this value been verified?		Measurement method correctly described?		Correct reference to standards?		Indication of accuracy provided?		QA/QC procedures described?		QA/QC procedures appropriate?		p	p
Monitoring Checklist	Yes / No																												
Title in line with methodology?																													
Data unit correctly expressed?																													
Appropriate description of parameter?																													
Source clearly referenced?																													
Correct value provided for estimation?																													
Has this value been verified?																													
Measurement method correctly described?																													
Correct reference to standards?																													
Indication of accuracy provided?																													
QA/QC procedures described?																													
QA/QC procedures appropriate?																													
B.7.1.25. Regulatory requirements relating to landfill gas projects	1,2,9 ,10	Not applicable. <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided for estimation?</td><td></td></tr></table>		Monitoring Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided for estimation?		p	p												
Monitoring Checklist	Yes / No																												
Title in line with methodology?																													
Data unit correctly expressed?																													
Appropriate description of parameter?																													
Source clearly referenced?																													
Correct value provided for estimation?																													

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		Has this value been verified?			
		Measurement method correctly described?			
		Correct reference to standards?			
		Indication of accuracy provided?			
		QA/QC procedures described?			
		QA/QC procedures appropriate?			
		(only at renewal of crediting period)			
B.7.1.26. Parameter Title: Operation h of the energy plant	1,2,9 ,10	Not applicable.		p	p
		Monitoring Checklist	Yes / No		
		Title in line with methodology?			
		Data unit correctly expressed?			
		Appropriate description of parameter?			
		Source clearly referenced?			
		Correct value provided for estimation?			
		Has this value been verified?			
		Measurement method correctly described?			
		Correct reference to standards?			
		Indication of accuracy provided?			
		QA/QC procedures described?			
		QA/QC procedures appropriate?			
B.7.1.27. Parameter Title: Operation h of the boiler	1,2,9 ,10	Corrective Action Request 53: Regarding the parameter “Operation h of the autoclave”: The source of data should be indicated in the PDD.		CAR 53	p

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		Monitoring Checklist	Yes / No		
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	No		
		Correct value provided for estimation?	Yes		
		Has this value been verified?	Yes		
		Measurement method correctly described?	Yes		
		Correct reference to standards?	Yes		
		Indication of accuracy provided?	Yes		
		QA/QC procedures described?	Yes		
		QA/QC procedures appropriate?	Yes		
B.7.1.28. Is the Global Warming Potential going to be monitored at the end of the first commitment period?	1,2,9,10	Not applicable.		p	p
Parameters to be monitored according to the Tool to determine project emissions from flaring gases containing methane					
B.7.1.29. Parameter: • flare, h Flare efficiency in hour <i>h</i> based on measurements or default values	1,2,11	Corrective Action Request 54: The parameter • flare, h Flare efficiency in hour <i>h</i> based on measurements or default values should be mentioned in B.7.1. of the PDD with all its necessary explanations.		CAR 54	p
		Monitoring Checklist	Yes / No		

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		Title in line with methodology?	No		
		Data unit correctly expressed?			
		Appropriate description of parameter?			
		Source clearly referenced?			
		Correct value provided for estimation?			
		Has this value been verified?			
		Measurement method correctly described?			
		Correct reference to standards?			
		Indication of accuracy provided?			
		QA/QC procedures described?			
		QA/QC procedures appropriate?			
B.7.1.30. Parameter Title: $fv_{i,h}$ – Volumetric fraction of component i in the residual gas in the hour h were i = CH ₄ , CO, CO ₂ , O ₂ , H ₂ , N ₂	1,2, 11	<u>Corrective Action Request 55:</u> The parameter $fv_{i,h}$ – Volumetric fraction of component i in the residual gas in the hour h were i = CH ₄ , CO, CO ₂ , O ₂ , H ₂ , N ₂ should be mentioned in B.7.1. of the PDD with all its necessary explanations.		CAR 55	p
		Monitoring Checklist	Yes / No		
		Title in line with methodology?	No		
		Data unit correctly expressed?			
		Appropriate description of parameter?			
		Source clearly referenced?			
		Correct value provided for estimation?			
		Has this value been verified?			
		Measurement method correctly described?			
		Correct reference to standards?			

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		Indication of accuracy provided?				
		QA/QC procedures described?				
		QA/QC procedures appropriate?				
B.7.1.31. Parameter Title: FV _{RG,h} – Volumetric flow rate of the residual gas in dry basis at normal conditions in the hour h	1,2, 11	Corrective Action Request 56: The parameter FV _{RG,h} – Volumetric flow rate of the residual gas in dry basis at normal conditions in the hour h should be mentioned in B.7.1. of the PDD with all its necessary explanations.			CAR 56	p
		Monitoring Checklist		Yes / No		
		Title in line with methodology?				
		Data unit correctly expressed?				
		Appropriate description of parameter?				
		Source clearly referenced?				
		Correct value provided for estimation?				
		Has this value been verified?				
		Measurement method correctly described?				
		Correct reference to standards?				
		Indication of accuracy provided?				
		QA/QC procedures described?				
		QA/QC procedures appropriate?				
B.7.1.32. Parameter Title: t _{O2,h} – Volumetric fraction of O2 in the exhaust gas of the flare in the hour h (only in case of enclosed flares and the flare efficiency is continuously monitored)	1,2, 11	Corrective Action Request 57: The parameter t _{O2,h} – Volumetric fraction of O2 in the exhaust gas of the flare in the hour h should be mentioned in B.7.1. of the PDD with all its necessary explanations.			CAR 57	p
		Monitoring Checklist		Yes / No		

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		Title in line with methodology?				
		Data unit correctly expressed?				
		Appropriate description of parameter?				
		Source clearly referenced?				
		Correct value provided for estimation?				
		Has this value been verified?				
		Measurement method correctly described?				
		Correct reference to standards?				
		Indication of accuracy provided?				
		QA/QC procedures described?				
		QA/QC procedures appropriate?				
B.7.1.33. Parameter Title: fv _{CH4,FG,h} – Concentration of methane in the exhaust gas of the flare in dry basis at normal conditions in the hour h (only applicable in case of enclosed flares and the flare efficiency is continuously monitored)	1,2, 11	<u>Corrective Action Request 58:</u> The parameter fv _{CH4,FG,h} – Concentration of methane in the exhaust gas of the flare in dry basis at normal conditions in the hour h should be mentioned in B.7.1. of the PDD with all its necessary explanations.			CAR 58	p
Monitoring Checklist		Yes / No				
Title in line with methodology?		No				
Data unit correctly expressed?						
Appropriate description of parameter?						
Source clearly referenced?						
Correct value provided for estimation?						
Has this value been verified?						
Measurement method correctly described?						
Correct reference to standards?						
Indication of accuracy provided?						

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		QA/QC procedures described?				
		QA/QC procedures appropriate?				
B.7.1.34. Parameter Title: T _{flare} – Temperature in the exhaust gas of the flare	1,2, 11	Corrective Action Request 59: Regarding the parameter T _{flare} – Temperature in the exhaust gas of the flare: Description of measurement method should be indicated as per the methodology.			CAR 59	p
		Monitoring Checklist	Yes / No			
		Title in line with methodology?	Yes			
		Data unit correctly expressed?	Yes			
		Appropriate description of parameter?	Yes			
		Source clearly referenced?	Yes			
		Correct value provided for estimation?	Yes			
		Has this value been verified?	Yes			
		Measurement method correctly described?	No			
		Correct reference to standards?	Yes			
		Indication of accuracy provided?	Yes			
		QA/QC procedures described?	Yes			
		QA/QC procedures appropriate?	Yes			
B.7.1.35. Parameter Title: - Any other parameters required to monitor proper operation of the flare according to the manufacturer's specification (only in the case of use of a default value for the flare efficiency of enclosed and open flares)	1,2, 11	Not applicable			p	p
		Monitoring Checklist	Yes / No			
		Title in line with methodology?				
		Data unit correctly expressed?				
		Appropriate description of parameter?				
		Source clearly referenced?				
		Correct value provided for estimation?				

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		Has this value been verified?				
		Measurement method correctly described?				
		Correct reference to standards?				
		Indication of accuracy provided?				
		QA/QC procedures described?				
		QA/QC procedures appropriate?				
B.7.2. Description of the monitoring plan						
B.7.2.1. Is the operational and management structure clearly described and in compliance with the envisioned situation?	1,2	Yes. The operational and management structure is clearly described and in compliance with the envisioned situation.			p	p
B.7.2.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	1,2	Yes. Responsibilities and institutional arrangements for data collection and archiving are clearly provided.			p	p
B.7.2.3. Does the monitoring plan provide current good monitoring practice?	1,2	Yes. The monitoring plan provides current good monitoring practice.			p	p
B.7.2.4. If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?	1,2, 11	<u>Corrective Action Request 60:</u> 1. The chapter “flare efficiency” should be revised by the project participants. The validation team does not understand why the fraction of CO, CO2, O2, H2 and N2 has to be measured for the flare efficiency. Flare efficiency is much more defined as the ratio between the mass flow rate of methane in the exhaust gas of the flare and the mass flow rate of methane in residual gas stream that is flared (both			CAR 60	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		referred to in dry basis and normal (NTP) conditions). Moreover, the flare efficiency is 0 % if the temperature of the exhaust gas of the flare is below 500 °C during more than 20 minutes during the hour h. PPs are requested to correct in the PDD. 2. It should be included information how project emissions from residual gas will be monitored.		
B.8. Date of completion of the application of the baseline study and monitoring methodology an the name of the responsible person(s)/entity(ies)				
B.8.1.1. Is there any indication of a date when the baseline was determined?	1,2	Yes. The baseline was determined on August 27, 2007.	p	p
B.8.1.2. Is this consistent with the time line of the PDD history?	1,2	Yes. This is consistent with the time line of the PDD history.	p	p
B.8.1.3. Is the information on the person(s) / entity(ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?	1,2	Ecoinvest Carbon Brasil Ltda. Rua Padre João Manoel 222 01411-000 São Paulo – SP Brazil Lilian Cristine Poll Herrmann	p	p
B.8.1.4. Is information provided whether this person / entity is also considered a project participant?	1,2	Ecoinvest Carbon Brasil Ltda. Is also project participant of the project.	p	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
C. Duration of the project activity / crediting period				
C.1. Duration of the project activity				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	1,2	The operational lifetime is clearly defined with 21 years. However, the project's starting date is not clearly defined. See A.4.3.10.	CAR 6	p
C.2. Choice of the crediting period and related information				
C.2.1. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	1,2	Corrective Action Request 61: PPs are requested to modify the start of the crediting period as between submission for registration and start of the crediting period has to be a period of at least 8 weeks.	CAR 61	p
D. Environmental impacts				
D.1. Documentation on the analysis of the environmental impacts, including transboundary impacts				
D.1.1. Has the analysis of the environmental impacts of the project activity been sufficiently described?	1,2,5	Yes. The environmental impacts of the project activity have been sufficiently described.	p	p
D.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved?	1,2,5	An EIA is not necessary.	p	p
D.1.3. Will the project create any adverse environmental effects?	1,2,5	No. The project will not create any adverse environmental effects.	p	p

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D.1.4. Were transboundary environmental impacts identified in the analysis?	1,2,5	There are no transboundary environmental impacts. <u>Corrective Action Request 62:</u> The PDD should mention that the project activity does not imply any transboundary environmental impacts.	CAR 62	p
D.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party				
D.2.1. Have the identified environmental impacts been addressed in the project design sufficiently?	1,2,5	Identified environmental impacts have been addressed in the project design.	p	p
D.2.2. Does the project comply with environmental legislation in the host country?	1,2,5	<u>Clarification Request 13:</u> PPs are requested to inform the validation team whether the installation of the autoclave needs a new environmental permit (operational licence) and if yes such an updated environmental licence should be submitted to the validation team.	CR 13	p
E. Stakeholders' comments				
E.1. Brief description how comments by local stakeholders have been invited and compiled				
E.1.1. Have relevant stakeholders been consulted?	1,2,7	Yes. Relevant stakeholders have been consulted.	p	p
E.1.2. Have appropriate media been used to invite comments by local stakeholders?	1,2,7	The invitations to local stakeholders were sent by postal to local stakeholders.	p	p

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E.1.3. 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?	1,2,7	The Brazilian DNA gives guidance how the local stakeholder process has to be conducted. The validation team may confirm that the process has been performed as required.	p	p
E.1.4. Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?	1,2,7	Yes. The undertaken stakeholder process is described in a complete and transparent manner..	p	p
E.2. Summary of the comments received				
E.2.1. Is a summary of the received stakeholder comments provided?	1,2,7	A letter from FBOMS was received, suggesting the use of Gold Standard or similar tools.	p	p
E.3. Report on how due account was taken of any comments received				
E.3.1. Has due account been taken of any stakeholder comments received?	1,2,7	The project participants consider that requests made by the Brazilian Government are sufficient to be used as sustainable indicators which are attended by this CDM project activity	p	p
F. Annexes 1 - 4				
F.1. Annex 1: Contact Information				
F.1.1. Is the information provided consistent with the one given under section A.3?	1,2,3	Yes. The information provided is consistent with the one given under section A.3.	p	p
F.1.2. Is the information on all private participants and directly involved Parties presented?	1,2,3	Yes. All information on private participants is presented.	p	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
F.2. Annex 2: Information regarding public funding				
F.2.1. Is the information provided on the inclusion of public funding (if any) in consistency with the actual situation presented by the project participants?	1,2,6	The information provided on public funding is consistent with the actual situation presented by the project participants.	p	p
F.2.2. If necessary: Is an affirmation available that any such funding from Annex-I countries does not result in a diversion of ODA?	1,2,6	Not applicable as no funding involved.	p	p
F.3. Annex 3: Baseline information				
F.3.1. If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?	1,2	<u>Corrective Action Request 63:</u> <ol style="list-style-type: none"> 1. Flare efficiency: Earlier in the PDD the PPs decided to use the option “Continuous monitoring of the methane destruction efficiency of the flare”, in Annex 3 PPs use a default value of 90 %. PPs are requested to chose an approach which is consistent throughout the whole PDD. 2. The reference of the IPCC values should include the page(s) of the chapter(s). 	CAR 63	p
F.3.2. Is the data provided verifiable? Has sufficient evidence been provided to the validation team?	1,2	<u>Corrective Action Request 64:</u> <ol style="list-style-type: none"> 1. The baseline and project emission calculation should be detailed illustrated in Annex 3 of the PDD or in a separate Excel calculation sheet. Annex 3 up to now only provides information about the landfill calculation parameters used 	CAR 64	p

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		but does not indicate any calculation with real numbers. 2. The calculation “Project emissions associated with electricity import” should be updated using the new emissions factor 2006.		
F.3.3. Does the additional information substantiate / support statements given in other sections of the PDD?	1,2	See F.3.2.	See CAR 64	p
F.4. Annex 4: Monitoring information				
F.4.1. If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?	1,2	Yes. Information is consistent with data presented in other sections of the PDD.	p	p
F.4.2. Is the information provided verifiable? Has sufficient evidence been provided to the validation team?	1,2	See B.7.2.4.	See CAR 60	p
F.4.3. Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PDD?	1,2	See B.7.2.4.	See CAR 60	p

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Table 2 Resolution of Corrective Action and Clarification Requests

Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
Corrective Action Requests:			
<u>Corrective Action Request No.1.</u> However, it is not mentioned in the description of the project activity that the project only consists of flaring of the captured gas and hence only claims CER credits for methane destruction, and not also for the generation of renewable energy. The project developer should add the information in the description of the project activity.	Table 1a, A.2.1.	The PDD was amended and the second version of the document was sent to DOE on 10 November, 2006.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request No.2.</u> Project participants (PPs) are requested to mention in the description of the PDD the significance of the autoclave and that this autoclave will produce thermal energy. Till now, it is not clear that it is the autoclave which will produce the thermal energy.	Table 1b, A.2.1.	The autoclave was excluded from the project activity once it will not use biogas during the crediting period. The PDD was amended. Please refer to the seventeenth version of the document.	Answer 19.01.2008: The autoclave was taken out of the project activity. CAR 2 is considered to be resolved. p
<u>Corrective Action Request No.3.</u> The following documents should be provided to the validation team in order to prove that the project description is in compliance with the actual situation: -Proof(s) about the current passive venting	Table 1b, A.2.2.	- The current passive venting system was seen during the validation visit. In the second page of the environmental permit some specific conditions to operate the landfill are described. One of them is to operate the landfill with a system of collection of the gas. Operating landfills with a passive venting system is a legal obliga-	Answer 19.01.2008: 1. Answer may be accepted. 2. The photos as well as the electronic files do not mention the use of an enclosed

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<p>system</p> <ul style="list-style-type: none"> -Proofs (photos, documents) about the enclosed flares -Evidences about the installation of the methane collection and destruction equipment -Proof about the (upcoming) installation of the autoclave 		<p>tion for security reasons. If there wasn't this system, the environmental agency would not have renewed the environmental permit.</p> <ul style="list-style-type: none"> - There are no photos of the enclosed flare once it was not installed till the moment. - Electronic files with the engineer project of the collection system containing the enclosed flare were previously sent to the DOE as a proof of the intention of building it. - The autoclave excluded from the project activity once it will not use biogas during the crediting period. <p>Answer 17.03.2008</p> <p>Moreover, the environmental licensing process for the forced exhaustion of the biogas has just initiated. Only after the construction permit is issued the implementation of the system described in the PDD can be done. In this sense, project participants believe it is enough evidenced that instead of a forced exhausted system in the landfill there is only the passive collection of the landfill gas.</p> <p>Regarding the evidences about the installation of the enclosed flare, please see attached the technical description of the project provided by the engineering company responsible for its implementation. The name of the file is "AR-CR biogas". Please also refer to the attached file "AR-CR-04 DE 04modb" which is the technical drawing obviously representing an enclosed flare.</p>	<p>flare. It have to be submitted clear evidences for the use of an enclosed flare like technical characteristics or others.</p> <p>3. If in the meanwhile more evidences about the installation of the methane collection and destruction equipment exist, please submit it to the validation team.</p> <p>4. Not applicable anymore as the autoclave was excluded from the project activity.</p> <p>Answer 24.03.2008:</p> <p>2. The technical description of the project provided by the engineering company and the technical drawing obviously show the pretended usage of an enclosed flare.</p> <p>3. Solicitation issued by Santech for the environmental previous and installation license for the proposed project activity (methane collection and destruction system) has been submitted to the validation team. FATMA has confirmed it with protocol, N°</p>
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			3604 07, dated 30/10/2007. CAR 3 is considered to be resolved. p
<u>Corrective Action Request No.4.</u> Project participants are requested to submit to the validation team and mention in the PDD the technical characteristics of -the autoclave -enclosed flares and prove by evidences that indeed enclosed flares are/will be in use. -Besides, it should be indicated how many enclosed flares (are) will be in use.	Table 1b, A.4.3.2.	The autoclave excluded from the project activity once it will not use biogas during the crediting period; there are no technical definitions of the enclosed flare until the moment. Accordingly to the engineering project it will be used one enclosed flare in this project activity. Please refer to the seventeenth version of the PDD. Answer 17.03.2008 The PDD was amended to explicitly mention that will be installed only one enclosed flare.	Answer 19.01.2008: -not relevant anymore as the autoclave has been excluded from the project activity. -Page 15 of the PDD mentions still “enclosed flares”. It should be clear throughout the whole PDD that only one enclosed flare will be used (at least in the beginning of the project activity). Answer 24.03.2008: CAR 4 is considered to be resolved. p
<u>Corrective Action Request No.5.</u> Evidences (certificates, participation lists) about training of personnel involved in the CDM project activity should be submitted to the validation team. Besides, it should be clear what demand and requirements for training and maintenance exist.	Table 1b, A.4.3.8.	There are no certificates or participation lists about training of the personnel involved in the project activity once it didn't started. As stated in the schedule, the manual for the operation of the system is planned to be completed in April 2008. Moreover the beginning of staff's training will only take place in July 2008. In this sense there isn't any official document stating how the operation and training will look like. These document will only be available at the verification stage.	Answer 19.01.2008: The last submitted PDD states that staff's training will begin on July 01, 2008. This is sufficient for validation purposes. CAR 5 is considered to be resolved. p

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<p><u>Corrective Action Request No.6.</u></p> <p>It should be submitted a time schedule showing the single steps of implementation of the capture and flaring system as well as the autoclave.</p> <p>It should be clearly defined the project's starting date and be evidenced why that specific date was taken.</p>	<p>Table 1b, A.4.3.10</p>	<p>A revised schedule is submitted to the DOE and the autoclave excluded from the project activity.</p> <p>The project's starting date is March 31st, 2005. This is the date when the company started its activities as evidenced in the file "<i>SANTECH_Contrato Sociedade</i>".</p> <p>Answer 17.03.2008</p> <ol style="list-style-type: none"> 1. The schedule was included in section A.4.3 of the PDD. Please refer to the eighteenth version of the PDD. 2. The project activity starting date is June 6th, 2006. This represents the date in which the contract between SANTECH and Ecoinvest signed the contract to develop the CDM project. 	<p>Answer 19.01.2008:</p> <p>The revised time schedule was submitted to the validation team.</p> <ol style="list-style-type: none"> 1. Project participants are requested to include that time schedule into the PDD. 2. According to a EB decision, the CDM project start is defined as start of the construction or first real actions. Please revise the project's starting date and refer to the construction start or to first real actions of the CDM project activity. <p>Answer 24.03.2008:</p> <ol style="list-style-type: none"> 1. Time schedule has been included in the last submitted PDD. 2. The project's starting date has been changed to June 06, 2006, the day when the contract between SANTECH and
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			<p>Ecoinvest has been signed. This date may be accepted by the validation team as date of first real action. Construction has not begun yet, neither a purchase agreement of the main equipment exists.</p> <p>CAR 6 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.7.</u></p> <p>Criteria 1-3 of the flaring tool should be discussed in the PDD.</p>	<p>Table 1b, B.2.5.</p>	<p>The criteria of the mentioned tool were included in the seventeenth version of the PDD.</p> <p>Answer 17.03.2008</p> <p>The mentioned criteria were already discussed in the seventeenth version of the PDD from page 15 on.</p> <p>Answer 27.08.2003</p> <p>The project consists of extracting gases of a landfill with a forced extraction system and the basic composition of the gas, as stated in the engineering project, is basically methane and carbon dioxide. This information was included in the PDD in section B.6.1. Please refer to the nineteenth version.</p> <p>Answer 07.04.2008</p> <p>The sentence was revised in the twentieth version of the PDD.</p>	<p>Answer 19.01.2008:</p> <p>The criteria 1-3 are not discussed yet in the PDD. Please add.</p> <p>Answer 24.03.2008:</p> <p>The three applicability criteria of the flaring tool are not mentioned yet in the PDD. Please add. Please refer to B.2.5. of this protocol.</p> <p>Answer 02.04.2008:</p> <p>Formulation has to be revised.</p> <p>Answer 07.04.2008:</p> <p>Formulation may be accepted as given in the last submitted</p>

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			PDD. CAR 7 is considered to be resolved. p
<p><u>Corrective Action Request No.8.</u></p> <p>It should be discussed in the PDD whether CO2 emissions for transport or for the collection of landfill gas occur.</p> <p>If there does not occur any CO2 emissions resulting from combustion of other fuels than the methane recovered fuel combustion, then this source should be discussed as excluded in the PDD.</p>	Table 1b, B.3.1.	<p>As explained in section B.3. of the PDD the only source of emission of CO₂ is due to electricity consumption.</p> <p>Answer 17.03.2008</p> <p>The requested information was added in the eighteenth version of the PDD.</p>	<p>Answer 19.01.2008:</p> <p>If there does not occur any CO2 emissions resulting from combustion of fossil fuels then this source should be discussed in B.3. as excluded in the PDD.</p> <p>Answer 24.03.2008:</p> <p>CO2 emissions resulting from combustion of fossil fuels have been excluded from the project boundary. This is mentioned in the last submitted PDD.</p> <p>CAR 8 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.9.</u></p> <p>-It should be clearly mentioned in the PDD that there is no baseline for electricity generation, as this part is not included in the project activity.</p> <p>-It should be in more detail explained that heat is generated in a diesel boiler for heat generation.</p>	Table 1b, B.6.4.4.	<p>- The request was included in the revised version of the PDD. Please refer to the seventeenth version of the document.</p> <p>- The autoclave excluded from the project activity.</p> <p>Answer 17.03.2008</p> <p>The requested information was included in section B.3, of the PDD.</p> <p>Answer 27.03.2008</p> <p>The PDD was amended. Please refer to the nineteenth</p>	<p>Answer 19.01.2008:</p> <p>Part 1 of CAR 8: "It should be clearly mentioned in the PDD that there is no baseline for electricity generation, as this part is not included in the project activity" has not been responded yet.</p> <p>Please include that information in the PDD.</p>

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		version.	<p>Answer 24.03.2008: It is not clear to the validation team why the baseline consists of “electricity consumption”. Please correct to “electricity generation”.</p> <p>Answer 02.04.2008: Correction has been provided in the last submitted PDD. CAR 9 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.10.</u> It should be mentioned in the PDD that the additionality tool (version 3) is applied.</p>	Table 1b, B.5.1.	The forth version of the “Tool for the demonstration and assessment of additionality” is mentioned in section B.1. of the PDD.	<p>Answer 19.01.2008: The additionality tool with its most recent version (version 4) is indicated in the last submitted PDD. CAR 10 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.11.</u> According to the additionality tool and the methodology ACM0001 the proposed project activity undertaken without being registered as a CDM activity has to be included in the alternatives.</p>	Table 1b, B.5.2.	The mentioned alternative was included in the discussion about the identification of the most plausible scenario. Please refer to the seventeenth version of the PDD.	<p>Answer 19.01.2008: The proposed project activity undertaken without being registered as a CDM activity has been included as alternative in the last submitted PDD. CAR 11 is considered to be</p>

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			resolved. p.
<u>Corrective Action Request No.12.</u> Stronger evidences should be submitted to the validation team showing that diesel oil is abundant in Brazil. The PDD should be re-vised.	Table 1b, B.5.14.	The autoclave excluded from the project activity once it will not use biogas during the crediting period. Hence, there is no need to discuss the availability of fossil fuels as requested in the methodology.	Answer 19.01.2008: As the autoclave has been excluded from the project activity, CAR 11 is not relevant anymore. CAR 12 is considered to be resolved. p.
<u>Corrective Action Request No.13.</u> Step 2 (Investment analysis) should be conducted for each component, i.e. in the project case also for the heat generation part.	Table 1b, B.5.16.	The autoclave was excluded from the project activity. As a consequence the only component that must be addressed in the investment analysis is the collection and destruction equipment installation.	Answer 19.01.2008: As the autoclave has been excluded from the project activity, CAR 12 is not relevant anymore. CAR 13 is considered to be resolved. p
<u>Corrective Action Request No.14.</u> It should be demonstrated in the PDD that after application of the investment analysis only one alternative remains, namely the continuation of the current situation (passive venting system) and explain in the PDD why the project activity without being realized as a CDM project is being kicked out as alternative after the investment analysis.	Table 1b, B.5.25.	In sub-step 2 is written: <i>"By investing in a landfill gas collection and flaring systems, the Project would not generate any revenues in the absence of the CDM. Therefore, the project activity is not economically attractive and not a realistic base-line scenario."</i> Hence, there is no financial motivation to implement the project activity without being a CDM project and that is why <i>"the project activity without being realized as a CDM project is being kicked out as alternative after the investment analysis"</i> . Answer 17.03.2008 The PDD was amended. Please refer to the eighteenth	Answer 19.01.2008: It is not written in the PDD how the project owner indicates in his answer. Please revise. Answer 24.03.2008: Necessary information has been added in the last submitted PDD. CAR 14 is considered to be resolved. p

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		version of the document.	
<p><u>Corrective Action Request No.15.</u></p> <p>Step 4b) should be updated, mentioning both landfills which have a forced methane extraction and destruction, using blowers, collection systems and flaring systems without being registered as CDM project as well those which were registered as CDM projects in the meanwhile.</p>	Table 1b, B.5.27.	<p>Project Participants could not address how many landfills are equipped with a forced extraction system of methane. Instead, it was chosen to estimate how much waste is disposed into Landfills and how much of this correspond to CDM or not.</p> <p>The result was discussed in the seventeenth version of the PDD and the worksheet with the research is attached.</p> <p>Answer 17.03.2008</p> <p>An one official document elaborated by the Brazilian Ministry if the Cities states that from the analyzed sample only 5.9% of the landfills of the country utilizes a forced methane extraction system. This evidences that using the landfill gas can not be considered the common practice in the country.</p> <p>The PDD was amended to reflect the results presented in this document. Please refer to the eighteenth version of the PDD.</p> <p>Answer 27.08.2008</p> <p>The PDD was amended. A spreadsheet containing the information of the research is attached.</p> <p>Answer 07.04.2008</p> <p>The information was revised in the twentieth version of the PDD.</p>	<p>Answer 19.01.2008:</p> <p>Answer given by the project owner may not be accepted. It has to be clear which other landfills (without and with CDM) exist. If there are landfills with a forced methane extraction and destruction system but without being realized as a CDM project activity, then distinctions to the proposed project activity have been explained and evidenced (see addtitionality tool).</p> <p>Answer 24.03.2008:</p> <p>Please indicate how many of these 5.9 % landfills are CDM projects and how many not. Please indicate the source. Please try to determine distinctions between non-CDM projects (included in the figure of 5.9 %) and the proposed project activity (requirement of the addtionality tool, version 4).</p> <p>Answer 02.04.2008:</p> <p>Reference has to be speci-</p>

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			<p>fied.</p> <p>Answer 07.04.2008:</p> <p>The reference applied for the common practice analysis has been specified.</p> <p>CAR 15 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.16.</u></p> <p>Project participants (PPs) are requested to mention all relevant steps of the “Tool to determine project emissions from flaring gases containing methane” in B.6.1. of the PDD.</p>	Table 1b, B.6.11.	<p>The steps of the “Tool to determine project emissions from flaring gases containing methane” were included in section B.6.1. of the seventeenth version of the PDD.</p>	<p>Answer 19.01.2008:</p> <p>All 7 steps of the Tool have been included in B.6.1. of the last submitted PDD.</p> <p>CAR 16 is considered to be resolved. p.</p>
<p><u>Corrective Action Request No.17.</u></p> <p>The formula calculating the quantity of landfill gas flared by the project (using the US EPA First Order Decay Model) should be indicated in the PDD as well as the formula filled out with the real numbers.</p>	Table 1b, B.6.1.6.	<p>The information was added in Annex 3 of the seventeenth version of the PDD.</p> <p>Answer 17.03.2008</p> <p>The equations used in the PDD were taken from 2006 IPCC Guidelines for National Greenhouse Gas Inventories (Volume 5 - Chapter 3).</p>	<p>Answer 19.01.2008:</p> <p>Project participants are requested to submit the exact reference (volume, chapter and page if relevant) from where the formulae were taken for the US EPA First Order Decay Model. Only like that it is possible to assess the information in the PDD.</p> <p>Answer 24.03.2008:</p> <p>Answer is accepted.</p> <p>CAR 17 is considered to be resolved. p.</p>

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<u>Corrective Action Request No.18.</u> The parameter $EL_{LFG,y}$ should be described in chapter B.6.1. of the PDD.	Table 1b, B.6.1.10.	There is no need to describe this parameter once the project activity will not generate electricity using LFG.	Answer 19.01.2008: Answer may be accepted as no electricity is generated by using LFG. CAR 18 is considered to be resolved. p.
<u>Corrective Action Request No.19.</u> Regarding Tool to determine project emissions from flaring gases containing methane: Step 2 (formula, parameters, explanation) should be mentioned in the PDD.	Table 1b, B.6.1.15.	Please refer to CAR 15	Answer 19.01.2008: See CAR 15. CAR 19 is considered to be resolved. p.
<u>Corrective Action Request No.20.</u> Regarding Tool to determine project emissions from flaring gases containing methane: Step 3 (formula, parameters, explanation) should be mentioned in the PDD.	Table 1b, B.6.1.16.	Please refer to CAR 15	Answer 19.01.2008: See CAR 15. CAR 20 is considered to be resolved. p.
<u>Corrective Action Request No.21.</u> Regarding Tool to determine project emissions from flaring gases containing methane: Step 4 (formula, parameters, explanation) should be mentioned in the PDD.	Table 1b, B.6.1.17.	Please refer to CAR 15	Answer 19.01.2008: See CAR 15. CAR 21 is considered to be resolved. p.
<u>Corrective Action Request No.22.</u> The value of the parameter $MD_{project,y}$ should be indicated.	Table 1b, B.6.2.2.	The value was indicated in Annex 3. Answer 17.03.2008 1. The PDD was amended considering the default value of 90% for flare efficiency. Please refer to the eighteenth version of the PDD. 2. The technical description of the project provided by the engineering company responsible for its	Answer 19.01.2008: $MD_{project,y} = MD_{flared,y}$ and has been indicated in Annex 3 of the last submitted PDD. 1. However, it is not clear why the flare efficiency is 95

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		<p>implementation (“AR-CR biogas”) provides a approximately value for this parameter of 64%. This value, as stated in the document, is extremely conservative. In this sense PP's considered the rate of biogas collection as equal to 70% for the estimative purpose.</p> <p>Answer 27.03.2008</p> <p>The rate of 64% of collection of the biogas was applied. The revise spreadsheet and PDD are attached.</p>	<p>% instead of 90 % as indicated as default value in the methodology. Please revise.</p> <p>2.Besides, it is not clear from where the figure of 70 % for biomass collection comes from.</p> <p>Both information is necessary in order to assess whether the calculated figures for MDproject,y are correct.</p> <p>Answer 24.03.2008:</p> <ol style="list-style-type: none"> 1. Flare efficiency has been revised to 90 %. 2. The biogas collection efficiency should be corrected (in PDD and excel sheet) to 64 % (as indicated according to the document AR-CR biogas), as the estimation of CERs should be conservative. Please revise the emission reductions calculation in PDD and excel sheet. <p>Answer 02.04.2008:</p> <p>Collection rate of biogas has</p>
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			been corrected to 64 %. CAR 22 is considered to be resolved. p.
<u>Corrective Action Request No.23.</u> The value of the parameter MD _{flared, y} should be indicated.	Table 1b, B.6.2.3.	The value was indicated in Annex 3. Answer 17.03.2008 Please refer to CAR 21 answer. Answer 27.03.2008 Please refer to CAR 21 answer.	Answer 19.01.2008: MD _{flared, y} = MD _{project, y} and has been indicated in Annex 3 of the last submitted PDD. However, see CAR 21. Answer 02.04.2008: CAR 23 is considered to be resolved as CAR 22 was resolved. p.
<u>Corrective Action Request No.24.</u> The parameter LFG _{flare, y} – (estimate) Amount of LFG to be fed to flare should be indicated in B.6.2. with all its necessary explanations.	Table 1b, B.6.2.4.	This parameter is indicated in section B.7.1. This data needs to be monitored instead validated.	Answer 19.01.2008: Answer given by the project participants may be accepted by the validation team. CAR 24 is considered to be resolved. p.
<u>Corrective Action Request No.25.</u> The value of the parameter PE _{flare, y} should be indicated.	Table 1b, B.6.2.5.	This parameter is indicated in section B.7.1. This data needs to be monitored instead validated. Answer 17.03.2008 The PDD was corrected regarding the flare efficiency. The eighteenth version considers the default value of 90% as stated in the tool. The table presented in section B.6.4. of the PDD is in	Answer 19.01.2008: In order to assess the correctness of the calculation of project emissions (flare) it has to be clear to the validation team how the project developer arrives to a flare efficiency of 95 %. Please

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		<p>accordance with the specific guidelines for completing the Project Design Document. Beyond the emission from flaring the gas there are emissions from electricity consumption and both are summed in the table. For the amount of each one separately please refer to the calculation spreadsheet.</p> <p>Anyway the values indicated in the PDD were wrong and in the eighteenth version were corrected.</p>	<p>submit information.</p> <p>Further on, project emissions from flaring are not indicated in the emission reductions table in B.6.4. of the PDD. Please add.</p> <p>Answer 24.03.2008:</p> <p>Flare efficiency has been corrected to 90 %.</p> <p>Project emissions have been corrected in the last submitted PDD.</p> <p>CAR 25 is considered to be resolved. p.</p>
<p><u>Corrective Action Request No.26.</u></p> <p>The parameter $W_{CH_4, y}$ – (estimate) average methane content in LFG over time should be indicated in B.6.2. with all its necessary explanations.</p>	Table 1b, B.6.2.6.	This parameter is indicated in section B.7.1. This data needs to be monitored instead validated.	<p>Answer 19.01.2008:</p> <p>Answer given by the project participants may be accepted by the validation team.</p> <p>CAR 26 is considered to be resolved. p.</p>
<p><u>Corrective Action Request No.27.</u></p> <p>The value of the parameter MDthermal,y should be indicated.</p>	Table 1b, B.6.2.9.	The value was indicated in Annex 3.	<p>Answer 19.01.2008:</p> <p>The parameter “MDthermal,y” is zero as there is no methane destroyed for the generation of thermal energy. Value has been indicated as zero in Annex 3 of the last submitted PDD.</p>

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			CAR 27 is considered to be resolved. p
<u>Corrective Action Request No.28.</u> The parameter LFGthermal,y – (estimate) Amount of LFG to be fed to boiler should be indicated in B.6.2. with all its necessary explanations.	Table 1b, B.6.2.10.	There is no need to mention this parameter once the autoclave was excluded from the project activity.	Answer 19.01.2008: Autoclave was excluded. CAR 28 is considered to be resolved. p
<u>Corrective Action Request No.29.</u> The value of the parameter MDreg, y should be indicated.	Table 1b, B.6.2.11.	<p>The landfill does not have any contractual obligations nor exist regulatory requirements which oblige to combust methane. Nevertheless, the AF was estimated following the example provided by the methodology ACM0001, version 6, which is:</p> <p><i>“In cases where a specific system for collection and destruction of methane is mandated by regulatory or contractual requirements, the ratio of the destruction efficiency of that system to the destruction efficiency of the system used in the project activity shall be used.”</i></p> <p>The calculation results in an AF of 16.1 %, however in order to be conservative, the AF used for the project activity was 20%.</p> <p>Please refer to the calculation in B.6.1..</p>	<p>Answer 26.05.2008:</p> <p>The value of MDreg,y is indicated in Annex 3 of the last submitted PDD.</p> <p>Even though neither regulatory nor contractual requirements exist for landfills in Brazil which oblige the combustion of methane, the proposed project activity applies the ratio of the destruction efficiency of the system in the baseline scenario to the destruction efficiency of the system used in the project activity as proposed as one example in the guidance in ACM0001, version 6. The calculation results in an adjustment factor of 16.1 %, however in order to be conservative, project participants decided to use an adjustment</p>

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			factor of 20 %. CAR 29 is considered to be resolved. p
<u>Corrective Action Request No.30.</u> The parameter AF – Adjustment factor should be indicated in B.6.2. with all its necessary explanations.	Table 1b, B.6.2.12.	This parameter was included in section B.6.2. Please refer to the seventeenth version of the PDD.	Answer 19.01.2008: The adjustment factor has been correctly applied with 20 % and is mentioned in B.6.2 of the last submitted PDD. CAR 30 is considered to be resolved. p
<u>Corrective Action Request No.31.</u> The parameter “EF _{fuel,BL} : emission factor of baseline fossil fuel used, as identified in the baseline scenario identification procedure” should be mentioned in B.6.2. with all its necessary explanations.	Table 1b, B.6.2.15.	There is no need to mention this parameter once the autoclave was excluded from the project activity. In this sense no fossil fuel consumption in the project boundary was identified in the baseline scenario.	Answer 19.01.2008: Answer may be accepted as autoclave was excluded from the project activity. CAR 31 is considered to be resolved. p
<u>Corrective Action Request No.32.</u> The parameter “NCV _{fuel,BL} : Net calorific value of fuel, as identified through the baseline identification procedure” should be mentioned in B.6.2. with all its necessary explanations.	Table 1b, B.6.2.16.	There is no need to mention this parameter once the autoclave was excluded from the project activity. In this sense no fossil fuel consumption in the project boundary was identified in the baseline scenario.	Answer 19.01.2008: Answer may be accepted as autoclave was excluded from the project activity. CAR 32 is considered to be resolved. p
<u>Corrective Action Request No.33.</u> The parameter “ET _{LFG,y} – the quantity of thermal energy produced utilizing the landfill gas, which in the absence of the project activity would have been produced from on-	Table 1b, B.6.2.18.	There is no need to mention this parameter once the autoclave was excluded from the project activity.	Answer 19.01.2008: Answer may be accepted as autoclave was excluded from the project activity.

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site/offsite fossil fuel fired boiler, during the year y" should be mentioned in B.6.2. with all its necessary explanations.			CAR 33 is considered to be resolved. p
<u>Corrective Action Request No.34.</u> Regarding the parameter $CEF_{thermal,BL,y}$ – Carbon emission factor of thermal energy: The parameter specifications, which refer to $CEF_{thermal,BL,y}$ in the PDD are not correct. The specifications belong to parameter $EF_{fuel,BL}$. The parameter $CEF_{thermal,BL,y}$ – Carbon emission factor of thermal energy with all its explanations should be revised.	Table 1b, B.6.2.19.	There is no need to mention this parameter once the autoclave was excluded from the project activity and no thermal energy will be generated in the project boundary.	Answer 19.01.2008: Answer may be accepted as autoclave was excluded from the project activity. CAR 34 is considered to be resolved. p
<u>Corrective Action Request No.35.</u> The parameter $EF_{fuel,BL}$: Emission factor of the fuel, as identified through the baseline identification procedure, used in the boiler to generate the thermal energy in the absence of the project activity" should be mentioned in B.6.2. of the PDD with all its necessary explanations.	Table 1b, B.6.2.20.	Please see CAR 30.	Answer 19.01.2008: Answer may be accepted as autoclave was excluded from the project activity. CAR 35 is considered to be resolved. p
<u>Corrective Action Request No.36.</u> The parameter $NCV_{fuel,BL}$: Net calorific value of fuel, as identified through the baseline identification procedure, used in the boiler to generate the thermal energy in the absence of the project activity " should be mentioned in B.6.2. of the PDD with all its necessary explanations.	Table 1b, B.6.2.21.	Please see CAR 31.	Answer 19.01.2008: Answer may be accepted as autoclave was excluded from the project activity. CAR 36 is considered to be resolved. p

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<p><u>Corrective Action Request No.37.</u></p> <p>The parameter “•_{boiler}: energy efficiency of the boiler used in the absence of the project activity to generate the thermal energy” should be indicated in B.6.2. of the PDD with all its necessary explanations.</p>	<p>Table 1b, B.6.2.22.</p>	<p>There is no need to mention this parameter once the autoclave was excluded from the project activity.</p>	<p>Answer 19.01.2008: Answer may be accepted as autoclave was excluded from the project activity. CAR 37 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.38.</u></p> <p>The parameter “EL_{PR,y}: amount of electricity generated in an on-site fossil fuel fired power plant or imported from the grid as a result of the project activity, measured using an electricity meter (MWh)” should be indicated in B.6.2. of the PDD with all its necessary explanations.</p>	<p>Table 1b, B.6.2.23.</p>	<p>This parameter was included in section B.7.1. once it need to monitored. Please refer to the seventeenth version of the PDD.</p> <p>Answer 17.03.2008</p> <p>There is no evidence about how much energy the project is expected to consume once the model of the equipments are not defined yet. However, this value was estimated as described in the PDD.</p> <p>Answer 27.03.2008</p> <p>The engineer responsible for the project informed the estimated electricity consumption of the system. Please see attached the e-mail containing this information. The PDD was revised.</p> <p>Answer 07.04.2008</p> <p>The values were revised in the twentieth version of the PDD and in the spreadsheet. Please refer to the file “Eco-C_ Cálculo de CC do aterro SANTEC_2008.04.07” for the calculation.</p>	<p>Answer 19.01.2008: The validation team finally agrees with the project participants only to mention the parameter in B.7.1. of the PDD. However, it should be explained how the applied value was calculated.</p> <p>Answer 24.03.2008: The explanation in B.6.3. of the PDD should be illustrated in a way, that it is clear for any reader how the PPs get to the applied value for electricity consumption.</p> <p>Answer 02.04.2008: The applied value for estimated electricity consumption is not correct. Please revise values in PDD and excel sheet and recalculate project emissions and emission reductions.</p>

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			<p>Answer 07.04.2008:</p> <p>The applied value for estimated electricity consumption has been corrected.</p> <p>CAR 38 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.39.</u></p> <p>Regarding the parameter $CEF_{elec.,y,PR,y}$: carbon emissions factor of electricity:</p> <p>Title, description, value and measurement method should be revised or indicated (in B.6.2.).</p>	Table 1b, B.6.2.24.	The description of the parameter was amended. Please refer to seventeenth version of the PDD.	<p>Answer 19.01.2008:</p> <p>Amendment has been made in the last submitted PDD.</p> <p>CAR 39 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.40.</u></p> <p>Regarding parameter GWP_{CH_4} - Global Warming Potential value for methane for the first commitment period is 21 tCO_2e/tCH_4 (estimate):</p> <p>Description and justification of choice of data should be revised.</p>	Table 1b, B.6.2.30.	<p>Description and justification of choice of data were revised. Please refer to seventeenth version of the PDD.</p> <p>Answer 17.03.2008</p> <p>The PDD was amended. Please refer to the eighteenth version of the document.</p>	<p>Answer 19.01.2008:</p> <p>Please indicate justification of choice.</p> <p>Answer 24.03.2008:</p> <p>Information has been provided in the last submitted PDD.</p> <p>CAR 40 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.41.</u></p> <p>The formulae for the ex-ante calculation of emission reductions have to be filled out with the real numbers. Only like that it is possible for any reader to retrace how the final figures were calculated.</p>	Table 1b, B.6.3.2.	The necessary information to calculate the emission reductions are mentioned in Annex 3.	<p>Answer 19.01.2008:</p> <p>Answer given by the project participants may be accepted.</p> <p>CAR 41 is considered to be</p>

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			resolved. p
<p><u>Corrective Action Request No.42.</u></p> <p>In order to evaluate whether data provided in this and other chapters are correct and consistent, PPs are requested to submit the baseline and project emission calculation sheet to the validation team.</p>	Table 1b, B.6.3.3.	<p>The spreadsheet with the emission reductions calculation is attached.</p> <p>Answer 17.03.2008</p> <p>Yes, this was the correct spreadsheet at the time the validation protocol was issued. Nevertheless the calculation sheet was revised. Hence, the validation team shall now refer to the file “Eco-C_Cálculo de CC do aterro SANTEC_2008.03.17”.</p>	<p>Answer 19.01.2008:</p> <p>Two spreadsheets have been submitted to the validation team at the same time. The validation team has used the spreadsheet called “Eco-C_Calculo de CC do aterro SANTEC_2008.01.10” for the DOE conclusions on January 19, 2008. Ecoinvest should confirm that this spreadsheet is the correct one to use.</p> <p>Answer 24.03.2008:</p> <p>It has been clarified by Ecoinvest what spreadsheet to use.</p> <p>CAR 42 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.43.</u></p> <p>The value should be provided for the parameter LFG total,y - Total amount of landfill gas captured.</p>	Table 1b, B.7.1.2.	The value of this parameter is indicated in section B.7.1. Please refer to the seventeenth version of the PDD.	<p>Answer 19.01.2008:</p> <p>The value has been provided in B.7.1. of the last submitted PDD.</p> <p>CAR 43 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.44.</u></p> <p>Regarding the parameter LFG flare,y –</p>	Table 1b, B.7.1.3.	The value, description and measurement method of this parameter is indicated in section B.7.1. Please refer to	<p>Answer 19.01.2008:</p> <p>The description is not the</p>

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Amount of landfill gas flared: -Value should be indicated. -Descriptions should be according to the methodology. -The measurement method is not completely correctly indicated.		the seventeenth version of the PDD. Answer 17.03.2008 The PDD was amended. Please refer to the eighteenth version of the document.	same as indicated as per the methodology. Answer 24.03.2008: The description has been corrected. CAR 44 is considered to be resolved. p
<u>Corrective Action Request No.45.</u> Regarding the parameter LFG thermal,y – Amount of methane combusted in the auto-clave -Value should be indicated. -The measurement method is not completely correctly indicated.	Table 1b, B.7.1.5.	There is no need to mention this parameter once the autoclave was excluded from the project activity.	Answer 19.01.2008 Answer may be accepted as autoclave was excluded from the project activity. CAR 45 is considered to be resolved. p
<u>Corrective Action Request No.46.</u> Regarding the parameter PEflare, y - Project Emissions from flaring of the residual gas stream in year y: -Value should be indicated. -The measurement method is not completely correctly indicated. -QA/QC measures should be kept in general, referring to the Flaring Tool.	Table 1b, B.7.1.6.	- the value of the parameter was included in the PDD; - the measurement method and the QA/QC measures were revised. Answer 17.03.2008 Please see the answer of CAR 24.	Answer 19.01.2008: Value has been added. Measurement method and QA/QC measures have been revised. However, see CAR 24. Answer 24.03.2008: CAR 46 is considered to be resolved as CAR 25 is also resolved. p
<u>Corrective Action Request No.47.</u> Regarding the parameter T- Temperature of the landfill gas:	Table 1b, B.7.1.8.	This value is added in the seventeenth version of the PDD. It corresponds to the standard temperature used to determine the density of the methane used in the	Answer 19.01.2008: The value of 0 is not very logical to the validation team.

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The value should be indicated.		<p>estimative.</p> <p>Answer 17.03.2008</p> <p>All the parameters used in the estimative are standard values provided either by the methodology or a referenced document. In the case of the temperature the methodology provides the density of methane at a standard temperature which is 0°C. Nevertheless, this parameter is going to be monitored and at the verification stage it will be corrected as well as the parameters which are somehow influenced by it (e.g. density of the methane).</p>	<p>Please revise and justify the applied value.</p> <p>Answer 24.03.2008: Answer may be accepted. CAR 47 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.48.</u></p> <p>Regarding the parameter p – Pressure of the landfill gas:</p> <p>The value should be indicated and the data unit should be indicated as per methodology ACM0001.</p>	Table 1b, B.7.1.9.	<p>This value is added in the seventeenth version of the PDD. It corresponds to the standard pressure used to determine the density of the methane used in the estimative.</p> <p>Answer 17.03.2008</p> <p>A standard value of this parameter is mentioned in the methodology.</p> <p>Answer 27.03.2008</p> <p>1,013 bar is equal to 1.013 Pa, as it is written in the PDD. However, the value was corrected.</p>	<p>Answer 19.01.2008: Value has been indicated and data unit has been revised. However, it is not clear from where the value for the pressure was taken as the flow meter is not functioning yet. Please indicate the source.</p> <p>Answer 24.03.2008: The value is not correct. Please revise.</p> <p>Answer 02.04.2008: Information in the last submitted PDD has been revised. CAR 48 is considered to be resolved. p</p>
<u>Corrective Action Request No.49.</u>	Table 1b,	There is no need to mention this parameter once the	Answer 19.01.2008:

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Regarding parameter $EF_{fuel,BL}$: - CO2 emission factor of fossil fuel: -The description should refer to the fossil fuel used in the BL, namely diesel oil. -The source of data should be indicated in detail including volume, chapter and page of the 2006 IPCC Guidelines. Only like that it is possible for any reader to retrace whether the indicated value is correct.	B.7.1.15.	autoclave was excluded from the project activity.	Answer may be accepted as autoclave was excluded from the project activity. CAR 49 is considered to be resolved. p
<u>Corrective Action Request No.50.</u> Regarding parameter $NCV_{fuel,BL}$ – Net calorific value of fossil fuel: -The description is not correct and besides it should refer to the fossil fuel used in the BL, namely diesel oil. - The source of data should be indicated in detail including volume, chapter and page of the 2006 IPCC Guidelines. Only like that it is possible for any reader to retrace whether the indicated value is correct.	Table 1b, B.7.1.16.	There is no need to mention this parameter once the autoclave was excluded from the project activity.	Answer 19.01.2008: Answer may be accepted as autoclave was excluded from the project activity. CAR 50 is considered to be resolved. p
<u>Corrective Action Request No.51.</u> Regarding the parameter $CEF_{thermal,BL,y}$ – Carbon emission factor of thermal energy: The parameter specifications, which refer to $CEF_{thermal,BL,y}$ in the PDD are not correct. The specifications belong to parameter $EF_{fuel,BL}$. The parameter $CEF_{thermal,BL,y}$ – Carbon emission factor of thermal energy with all its explanations should be revised.	Table 1b, B.7.1.18.	There is no need to mention this parameter once the autoclave was excluded from the project activity.	Answer 19.01.2008: Answer may be accepted as autoclave was excluded from the project activity. CAR 51 is considered to be resolved. p

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<u>Corrective Action Request No.52.</u> Regarding parameter $CEF_{elec,y,PR,y}$ – Carbon emission factor of electricity: The title, description, value and measurement method should be corrected.	Table 1b, B.7.1.20.	Parameter $CEF_{elec,y,PR,y}$ has been revised.	Answer 19.01.2008: Parameter has been revised in the last submitted PDD. CAR 52 is considered to be resolved. p
<u>Corrective Action Request No.53.</u> Regarding the parameter “Operation h of the autoclave”: The source of data should be indicated in the PDD.	Table 1b, B.7.1.27.	There is no need to mention this parameter once the autoclave was excluded from the project activity.	Answer 19.01.2008: Answer may be accepted as autoclave was excluded from the project activity. CAR 53 is considered to be resolved. p
<u>Corrective Action Request No.54.</u> The parameter $\bullet_{flare,h}$ Flare efficiency in hour h based on measurements or default values should be mentioned in B.7.1. of the PDD with all its necessary explanations.	Table 1b, B.7.1.29.	This parameter will be calculated accordingly to the formulae described in section B.6.1. Hence there is no need to mention the value of the parameter. Moreover, the selected approach for the determination of flare efficiency is the use of the default value of 90%. Under this approach the flare efficiency is directly influenced by the temperature of the exhaust gas (T_{flare}) which is monitored and mentioned in the proper section of the PDD.	Answer 19.01.2008: The validation team accepts the answer of the project participants. CAR 54 is considered to be resolved. p
<u>Corrective Action Request No.55.</u> The parameter $fv_{i,h}$ – Volumetric fraction of component i in the residual gas in the hour h where $i = CH_4, CO, CO_2, O_2, H_2, N_2$ should be mentioned in B.7.1. of the PDD with all its necessary explanations.	Table 1b, B.7.1.30.	The mentioned parameter was included in section B.7.1. of the seventeenth version of the PDD.	Answer 19.01.2008: The parameter $fv_{i,h}$ has been included in the last submitted PDD. CAR 55 is considered to be resolved. p
<u>Corrective Action Request No.56.</u>	Table 1b,	The mentioned parameter was included in section	Answer 19.01.2008:

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The parameter $FV_{RG,h}$ – Volumetric flow rate of the residual gas in dry basis at normal conditions in the hour h should be mentioned in B.7.1. of the PDD with all its necessary explanations.	B.7.1.31.	B.7.1. of the seventeenth version of the PDD.	Parameter has been included in the last submitted PDD. CAR 56 is considered to be resolved. p
<u>Corrective Action Request No.57.</u> The parameter $t_{O2,h}$ – Volumetric fraction of O2 in the exhaust gas of the flare in the hour h should be mentioned in B.7.1. of the PDD with all its necessary explanations.	Table 1b, B.7.1.32.	The mentioned parameter was included in section B.7.1. of the seventeenth version of the PDD. Answer 17.03.2008 Under the approach selected by the project participants monitoring this parameter is not applicable. This parameter was excluded of the eighteenth version of the PDD.	Answer 19.01.2008: Please include all information regarding measurement methods as described per the tool. There is missing one part. Answer 24.03.2008: Parameter is not applicable, as the efficiency of the flare is not continuously monitored. CAR 57 is considered to be resolved. p
<u>Corrective Action Request No.58.</u> The parameter $fv_{CH4,FG,h}$ – Concentration of methane in the exhaust gas of the flare in dry basis at normal conditions in the hour h should be mentioned in B.7.1. of the PDD with all its necessary explanations.	Table 1b, B.7.1.33.	The mentioned parameter was included in section B.7.1. of the seventeenth version of the PDD. Answer 17.03.2008 Under the approach selected by the project participants monitoring this parameter is not applicable. This parameter was excluded of the eighteenth version of the PDD.	Answer 19.01.2008: Please include all information regarding measurement methods as described per the tool. There is missing one part. Answer 24.03.2008: Parameter is not applicable, as the efficiency of the flare is not continuously monitored. CAR 58 is considered to be

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			resolved. p
<u>Corrective Action Request No.59.</u> Regarding the parameter T _{flare} – Temperature in the exhaust gas of the flare: Description of measurement method should be indicated as per the methodology.	Table 1b, B.7.1.34.	The mentioned description was included in section B.7.1. of the seventeenth version of the PDD. Answer 17.03.2008 The missing part was included in the PDD. Please refer to the eighteenth version of the document.	Answer 19.01.2008: Please indicate still the comment as indicated per the tool. Answer 24.03.2008: Missing part has been included in the last submitted PDD. CAR 59 is considered to be resolved. p
<u>Corrective Action Request No.60.</u> 1. The chapter “flare efficiency” should be revised by the project participants. The validation team does not understand why the fraction of CO, CO ₂ , O ₂ , H ₂ and N ₂ has to be measured for the flare efficiency. Flare efficiency is much more defined as the ratio between the mass flow rate of methane in the exhaust gas of the flare and the mass flow rate of methane in residual gas stream that is flared (both referred to in dry basis and normal (NTP) conditions). Moreover, the flare efficiency is 0 % if the temperature of the exhaust gas of the flare is below 500 °C during more than 20 minutes during the hour h. PPs are requested to cor-	Table 1b, B.7.2.4.	1. Please refer to the seventeenth version of the PDD for the mentioned corrections request 2. Project emissions from residual gas will be monitored accordingly to the parameters mentioned in the “ <i>tool to determine project emissions from flaring gases containing methane</i> ”. All the necessary explanation and parameters were included in the seventeenth version of the PDD. Please refer to latest version of the document for the changes.	Answer 19.01.2008: Revision has been done in the last submitted PDD. CAR 60 is considered to be resolved. p

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rect in the PDD. 2. It should be included information how project emissions from residual gas will be monitored.			
<u>Corrective Action Request No.61.</u> PPs are requested to modify the start of the crediting period as between submission for registration and start of the crediting period has to be a period of at least 8 weeks.	Table 1b, C.2.1.	The starting date of the crediting period was postponed to October 1 st , 2008. This is the date in which the system of collecting the LFG will became operational.	Answer 19.01.2008: The crediting period has been modified to October 01, 2008. CAR 61 is considered to be resolved. p
<u>Corrective Action Request No.62.</u> The PDD should mention that the project activity does not imply any transboundary environmental impacts.	Table 1b, D.1.4.	The issuance of the environmental licenses evidences that the Environmental Agency believes the project does not have significant transboundary environmental impacts. This information was included in the seven-teenth version of the PDD.	Answer 19.01.2008: There are no transboundary environmental impacts. This information has been included in the last submitted PDD. CAR 62 is considered to be resolved. p
<u>Corrective Action Request No.63.</u> 1. Flare efficiency: Earlier in the PDD the PPs decided to use the option “Continuous monitoring of the methane destruction efficiency of the flare”, in Annex 3 PPs use a default value of 90 %. PPs are requested to chose an approach which is consistent throughout the whole PDD. 2. The reference of the IPCC values	Table 1b, F.3.1.	1. The 95% default value was used only for estimating project emission reductions. The option “Continuous monitoring of the methane destruction efficiency of the flare” continues to be valid. 2. Project Participants consider that citing the year and the volume of the reference is enough, once in any technical article this is the standard practice. Answer 17.03.2008 1. The PDD was revised. The 90% default value for flare efficiency is now applied.;	Answer 19.01.2008: 1. It is not clear why 95 % as default value is applied for estimation of project emissions. Please revise and use the default value of 90 % in order to be conservative. All calculations related with the

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should include the page(s) of the chapter(s).		2. The chapter was indicated.	<p>flare efficiency and project emissions from flaring should be revised.</p> <p>2. Please indicate page and chapter of the IPCC values used. This belongs to TUEV validation standards,</p> <p>Answer 24.03.2008:</p> <p>1. Project participants decided to use option a): Use of a default value. The flare efficiency has been revised in the last submitted PDD to 90 %.</p> <p>2. Chapter has been indicated in the last submitted PDD.</p> <p>CAR 63 is considered to be resolved. p</p>
<p><u>Corrective Action Request No.64.</u></p> <p>1. The baseline and project emission calculation should be detailed illustrated in Annex 3 of the PDD or in a separate Excel calculation sheet. Annex 3 up to now only provides information about the landfill calculation parameters used but does not indi-</p>	Table 1b, F.3.2.	<p>1. The calculation is detailed in a separate spreadsheet. Please refer to the file “Eco-C_ Cálculo de CC do aterro SANTEC_2008.01.10” and in Annex 3 of the seventeenth version of the PDD.</p> <p>2. All the calculations which involved the emission factor were up-dated. Please refer to the seventeenth version of the PDD.</p>	<p>Answer 19.01.2008:</p> <p>1. The validation team has received two excelsheets, but with other names. Please clarify which excel-sheet is finally to use</p>

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<p>cate any calculation with real numbers.</p> <p>2. The calculation “Project emissions associated with electricity import” should be updated using the new emissions factor 2006.</p>		<p>Answer 17.03.2008</p> <ol style="list-style-type: none"> 1. Please refer to the answer of 41; 2. Please refer to the answer of 37. <p>Answer 27.03.2008</p> <p>Please refer to the answer of CAR 37.</p> <p>Answer 07.04.2008</p> <p>The values were revised. Please refer to the twentieth version of the PDD.</p>	<p>for the assessment. Besides, the figures for emission reductions between excel-calculation sheet and PDD are not consistent. Please provide consistent information and an Excel sheet in only English language (without parts in Portuguese). A final evaluation of the correctness of the excel-sheet is thus not possible yet by the validation team.</p> <p>2. The EF has been updated. However, see CAR 37.</p> <p>Answer 24.03.2008:</p> <ol style="list-style-type: none"> 1. A new, revised Excel sheet has been submitted to the validation team. 2. See CAR 37 <p>Answer 07.04.2008:</p> <p>As CAR 37 may be considered as resolved, CAR 63 may be also considered to be</p>
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			resolved. CAR 64 is considered to be resolved. p
<u>Corrective Action Request No.65. (19.01.2008):</u> Regarding project emissions from flaring: The PDD mentions for all parameters of the Tool “Not used in <i>ex-ante</i> estimates”. If this is the case, then it has to be clearly demonstrated in the PDD how and which with values project emissions from flaring have been calculated.	Table 1b	Project emissions from flaring were calculated considering 10% of the total exhausted gas. Please refer to the spreadsheet for the calculations.	Answer 24.03.2008: Answer may be accepted. CAR 65 is considered to be resolved. p
Clarification Requests			
<u>Clarification Request 1:</u> Participants Declaration shall be signed by Ecoinvest Carbon and Santech before submitting to the Brazilian DNA.	Table 1a, A.3.2.	Attached	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Clarification Request 2:</u> It should be added the GPS information of the project site and indicated the exact address: Rodovia BR 101, km 389, Icara; Besides, the validation team recommends to use a more detailed map in the PDD.	Table 1a, A.4.1.	The PDD was amended and the second version of the document was sent to DOE on 10 November, 2006.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p

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<p>Clarification Request 3:</p> <p>1. The collection efficiency is indicated with 75 % in the PDD compared with 80 % used in the calculations. Ecoinvest should explain this difference, use one unique number and explain why this number was used.</p> <p>2. The description of the technology in the PDD mentions PVC or another impermeable material used to prevent the biogas to come out through the landfill surface. However, during the on-site visit it was told by Santech to the validation team that the Brazilian legislation does not permit the use of PVC for such purposes. It will be used a polyethylene of high density (PHDB) for the project. Ecoinvest should adjust these informations in the PDD.</p>	<p>Table 1a, A.4.5.</p>	<ol style="list-style-type: none"> 1. The collection efficiency was modified to 70 % for reasons of conservativeness, as shown in PDD version 11, Annex 3. 2. The landfill will be recovered by clay. HDPE (High-density polyethylene) is the material utilized in the base of the landfill for preventing groundwater contaminations by the leachate. 	<p>The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b.</p> <p>p</p>
<p>Clarification Request 4:</p> <p>However it has not been presented neither a financial nor a business plan to the validation team showing that the financing of the project will be realised by own equity capital and private credits. The validation team may accept the statements made by Santech during the on-site visit only if the necessary documents will be provided within 8-10 weeks to the validation team as promised by Santech Ltda. during the on-site visit.</p>	<p>Table 1a, A.5.1.</p>	<p>Information has been submitted.</p>	<p>The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b.</p> <p>p</p>
<p>Clarification Request 5:</p> <p>1. Equation 6 of chapter B.6.1 describes</p>	<p>Table 1a, B.2.9.</p>	<p>1. The PDD was amended and the second version</p>	<p>The revised PDD is responding to CARs and CRs given</p>

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<p>MD_{reg,y} as" the quantity of methane destroyed for the generation of thermal energy". However, equation 1 of chapter B.6.1 describes it as "the amount of methane that would have been destroyed / combusted during the year in the absence of the project, in tonnes of methane (tCH₄)". Equation 6 of chapter B.6.1 has to use the same explanation of the parameter MD_{reg,y} as the equation 1 which is the definition given in the methodology.</p> <p>2. It should be indicated the literature used for the Adjustment Factor of 20 %, the rate of biogas collection of 80 % and the flare efficiency which is indicated between 95 and 96 % in the PDD.</p>		<p>of the document was sent to DOE on 10 November, 2006.</p> <p>2. The Adjustment Factor rate for biogas and flare efficiency was addressed in PDD version 11 Annex 3.</p>	<p>by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b.</p> <p>þ</p>
<p>Clarification Request 6:</p> <p>The start of the crediting period is defined in the PDD for April 1st, 2007. However, the validation team has noticed during the on-site visit that this starting date is rather improbable as the project equipment will be purchased only in the beginning of 2007 and installation needs about 6 months. The validation team asks to clarify Ecoinvest if the envisioned project schedule is feasible?</p>	<p>Table 1a, C.1.2.</p>	<p>The foreseen date will be maintained</p>	<p>The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b.</p> <p>þ</p>
<p>Clarification Request 7:</p> <p>During the on-site visit there has not been</p>	<p>Table 1a, D.3.1.</p>	<p>The PDD was amended and the second version of the document was sent to DOE on 10 November, 2006.</p>	<p>The revised PDD is responding to CARs and CRs given</p>

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presented documents like a Monitoring Manual or monitoring procedures to the validation team showing how the monitoring looks like and confirming the information given in the PDD. Santech has assured to the validation team to provide such information within 8-10 weeks from the date of the on-site visit. Ecoinvest and Santech should make sure, that the validation team will receive the necessary information.		(Annex 4)	by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Clarification Request 8:</u> Although chapter B.7.1 mentions quality control procedures and quality assurance procedures for certain parameters, it is nothing said about the uncertainty levels, which are mentioned in the methodology. Ecoinvest should add the uncertainty levels for such parameters, where QC and QA procedures are mentioned.	Table 1a, D.7.2.	The PDD was amended and the second version of the document was sent to DOE on 10 November, 2006.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Clarification Request 9:</u> The monitoring information in Annex 4 is referring to Table 4b that explains the monitoring and calibration procedures. However, it is not possible for the validation team to find this Table in the PDD.	Table 1a, D.8.5	The PDD was amended and the second version of the document was sent to DOE on 10 November, 2006.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Clarification Request 10:</u> The PDD should explicitly mention the spatial boundaries of the project activity, regarding the sources	Table 1a, E.3.2.	The PDD was amended and the sixth version of the document was sent to DOE on 28 November, 2006. (Section B.2)	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue

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			will be indicated in Table 1b. p
Clarification Request 11: Ecoinvest (who was in charge for the invitations) has provided all receipts to the validation team, showing that the invitations were sent to the local stakeholders. However, one receipt, namely for the “Local community association” is still missing. Ecoinvest should provide this missing receipt to the validation team.	Table 1a, G.1.2.	Information has been submitted.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
Clarification Request 12: PPs should inform where the value of 50 % comes from.	Table 1b, B.7.1.7.	If the question refer to the parameter WCH4, which is Methane fraction in the landfill gas, it was used an estimated value only for the ex-ante estimative. The parameter is going to be monitored and its value was based on project developer’s experience.	Answer 19.01.2008: Answer may be accepted for validation purposes. CR 12 is considered to be resolved. p
Clarification Request 13: PPs are requested to inform the validation team whether the installation of the autoclave needs a new environmental permit (operational licence) and if yes such an updated environmental licence should be submitted to the validation team.	Table 1b D.2.2.	This CR is no longer applicable once the autoclave was excluded from the project activity. Nevertheless the environmental permit concerning the autoclave is attached for the porpoise of DOE’s conference.	Answer 19.01.2008: Not applicable anymore as the autoclave was excluded from the project activity. CR 13 is considered to be resolved. p

Table 3 Unresolved Corrective Action and Clarification Requests (in case of denials)

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Clarifications and / or corrective action requests by validation team	Id. of CAR/CR	Explanation of Conclusion for Denial
-	-	-


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Annex 2: Information Reference List

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Reference No.	Document or Type of Information
8	Declaration by Santech about financing with own capital, submitted in November, 2006.
9	Cash-Flow calculation with CER credits, excel-file, submitted in November, 2006.
10	Cost calculation of the landfill, excel-file, submitted in November, 2006.
11	Correspondence Stakeholder, Invitations to Stakeholders in Letter form, paper copies, submitted in August, 2006.
12	Approved baseline methodology ACM0001 (Version 4): "Consolidated baseline methodology for landfill gas project activities", UNFCCC, July, 2006.
13	Approved monitoring methodology ACM0001 (Version 4): "Consolidated monitoring methodology for landfill gas project activities. UNFCCC, July, 2006.
14	IPCC: Revised 2006 Guidelines for National Greenhouse Gas Inventories
15	IPCC: 2000, Good Practice Guidance
16	UNFCCC, CDM: Tool for the demonstration and assessment of additionality. UNFCCC, November 2005.
17	Contract between Santech Saneamento e Tecnologia Ambiental Ltda. and Ecoinvest Carbon Assessoria Ltda., dated 06/06/2006, submitted on March 18, 2008
18	Chronogram for the project implementation, "Cronograma_Biogas_07_121.pdf", dated December 2007, pdf-file, submitted on January 10, 2008.
19	Project history "Historico – Projeto Santec", Ecoinvest Carbon, word-file, submitted on April 11, 2008.
20	CER calculation sheet "Eco-C_Calculo de CC do aterro SANTEC_2008[1].04.16", excel-file, submitted on April 16, 2008.
21	Estimation of project costs "Cepollina_Ecoinvest_Custos-Aterro-SANTECH_2008.04.07", excel-file, submitted on April 07, 2008.
22	Research about common practice "Pratica Comun – Pesquisa Ministerio das Cidades", excel-file, submitted on March 27, 2008.
23	Email about electricity consumption of the proposed project activity, dated 18/03/2008, Outlook Email, submitted on March 27, 2008.

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Reference No.	Document or Type of Information
24	Protocol N° 3604/07, dated 30/10/2007, issued by FATMA confirming the solicitation for an environmental installation licence for the proposed project activity (capturing and flaring of biogas), pdf-file, submitted on
25	Environmental operational licence issued by FATMA, N° 166/2006, dated 24/08/2006, valid for 48 months, jpg-file, submitted on March 25, 2008.
26	Environmental operational licence issued by FUNDAI, N° 012/07, dated 06/12/2007, valid for one year, pdf-file, submitted on March 25, 2008.
27	Technical description of the project provided by CEPOLLINA (the engineering company responsible for its implementation), file: "AR-CR biogas", pdf-file, submitted on March 18, 2008.
28	Technical drawings, file: "AR-CR-04 DE 04modb", pdf-file, submitted on March 18, 2008.
29	Research about disposal of solid waste, "Diagnostico do manejo de residuos solidos urbanos – 2005", Ministerio das Cidades, dated August 2007, pdf-file, downloaded in April 2008.
30	Approved baseline methodology ACM0001 (Version 6): "Consolidated baseline methodology for landfill gas project activities", EB 32.
31	Approved monitoring methodology ACM0001 (Version 6): "Consolidated monitoring methodology for landfill gas project activities". EB 32.
32	Final Project Design Document "SANTECH – Saneamento & Tecnologia Ambiental Ltda. – SANTEC Resíduos landfill gas emission reduction Project Activity, Version 23, dated 23/05/2008, submitted on May 26, 2008.