VALIDATION REPORT

ORGANOESTE FRANCHISING LTDA.

ORGANOESTE DOURADOS & ANDRADINA COMPOSTING PROJECT

Report No: 8000364921 - 08/349

Date: 2009-10-20

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Final Approval by: Eric Krupp	Organisational unit: TÜV NORD JI/CDM Certification Program
Client: Organoeste Dourados & Andradina Composting Project	Client ref.: Mr. Fabiano Arantes
Summary:	☒ positive validation opinion ☐ negative validation opinion

Ecosecurities do Brasil, which is member of EcoSecurities International Limited and are responsible for negotioations on the host country (Brazil), has commissioned the TÜV NORD JI/CDM Certification Program (CP) to validate the project: "Organoeste Dourados & Andradina Composting Project" with regard to the relevant requirements of the UNFCCC for CDM project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria include article 12 of the Kyoto Protocol, the modalities and procedures for CDM (Marrakech Accords), the simplified modalities and procedures for small scale CDM project activities of annex II to decision 21/CP.8 and the relevant decisions by COP/MOP and CDM Executive Board.

The project activity produces organic fertilizer through aerobically composting process utilizing mainly agro industrial residues. The project intends to reduce GHG emissions by avoiding anaerobic decay, and therefore methane emission, of the residual waste applied in the project activity, which in the pre project scenario would be disposed in a landfill solid waste disposal.

A risk based approach has been followed to perform this validation. In the course of the pre-validation, 09 Corrective Action Requests (CARs) and 12 Clarification Requests (CRs) were raised and successfully closed.

The review of the project design documentation and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and review of comments by parties, stakeholders and NGOs have provided TÜV NORD JI/CDM CP with sufficient evidence to validate the fulfilment of the stated criteria.

In detail the conclusions can be summarised as follows:

- The project is in line with all relevant host country criteria (Brazil) and all relevant UNFCCC requirements for CDM.
- The project additionality is sufficiently justified in the PDD.
- The monitoring plan is transparent and adequate.
- The calculation of the project emission reductions is carried out in a transparent and conservative manner, so that the calculated emission reductions of 217,269 tCO_2e are most likely to be achieved within the 7 years (renewable) crediting period (1st Jul 2010 - 31th Jun 2017).

The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the validation.

Report No.: 8000364921 - 08/349	Subject Group: Climate Protection
Report title: Organoeste Dourados & Andradina Composting Project	
Work carried out by: Rainer Winter Fernando P. Pacheco Ana Maria de O. Guena	
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Indexing terms

Climate protection
Kyoto Protocol
CDM
Validation

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Abbreviations

BAU	Business as usual
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CO_2	Carbon dioxide
CO_{2e}	Carbon dioxide equivalent
CP	Certification Program
DNA	Designated National Authority
EB	CDM Executive Board
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
PDD	Project Design Document
QC/QA	Quality control/Quality assurance
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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1 OBJECTIVE / SCOPE

The purpose of a validation is to have an independent third party assess the project design. In particular the project's baseline, the monitoring plan (MP), and the project's compliance with

- the requirements of Article 12 of the Kyoto Protocol;
- the CDM modalities and procedures as agreed in the Marrakech Accords under decision 3/CMP.1
- the annex to the decision;
- subsequent decisions made by COP/MOP & CDM Executive Board and
- other relevant rules, including the host country legislation and sustainability criteria

are validated in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria. Validation is seen as necessary to provide assurance to stakeholders on the quality of the project and its intended generation of certified emission reductions (CERs).

The validation scope is given as a thorough independent and objective assessment of the project design including especially: the correct application of the methodology, the project's baseline study, additionality justification, local stakeholder commenting process, environmental impacts and monitoring plan, which are included in the PDD and other relevant supporting documents, to ensure that the proposed CDM project activity meets all relevant and applicable CDM criteria.

The information included in the PDD and the supporting documents were reviewed against the requirements as set out by the UNFCCC. The validation team has, based on the requirements in the Validation and Verification Manual[/VVM/], carried out a full assessment of all evidences to assess the compliance of the project with the key areas as outlined in section V.E. and V.F. of the VVM (version 1, EB 44).

The validation is based on the information made available to TÜV NORD JI/CDM CP and on the contract conditions. TÜV NORD JI/CDM CP can not be held liable by any entity for making its validation opinion based on any false or misleading information supplied to it during the course of validation.

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

2 GHG PROJECT DESCRIPTION

2.1 Project Characteristics

Essential data of the project is presented in the following Table 2-1.

Table 2-1: Project Characteristics

Item	Data		
Project title	Organoeste Dourados & Andradina Composting Project		
Project size	☐ Large Scale ☒ Small Scale		
Project Scope *(according to UNFCCC sectoral scope numbers for CDM)*	☐	1	Energy Industries (renewable- /non-renewable sources)
	☐	2	Energy distribution
	☐	3	Energy demand
	☐	4	Manufacturing industries
	☐	5	Chemical industry
	☐	6	Construction
	☐	7	Transport
	☐	8	Mining/Mineral production
	☐	9	Metal production
	☐	10	Fugitive emissions from fuels (solid, oil and gas)
	☐	11	Fugitive emissions from production and consumption of halocarbons and hexafluoride
	☐	12	Solvents use
	☒	13	Waste handling and disposal
	☐	14	Afforestation and Reforestation
	☐	15	Agriculture
Applied Methodology	*AMS-III.F – Avoidance of methane emissions through controlled biological treatment of biomass v.8*		
Crediting period	☒ Renewable Crediting Period (7 y) ☐ Fixed Crediting Period (10 y)		
Start of crediting period[1]	2010-07-01 or the registration date, whichever is later		

2.2 Involved Parties and Project Participants

The following parties to the Kyoto Protocol and project participants are involved in this project activity (Table 2-2).

Table 2-2: Project Parties and project participants

Characteristic	Party	Project Participant
Host party	Brazil	Organoeste Franchising Ltda.
Other involved party/ies	United Kingdom of Great Britain and Nortern Ireland	EcoSecurities International Limited

[1] As per the published PDD (version 1)

2.3 Project Location

The details of the project location are given in table 2-3:

Table 2-3: Project Location

No.	Project Location
Host Country	Brazil
Region:	Central-west Region, State of Mato Grosso do Sul
Project location address:	Dourados – Avenida Quatro, s/n, Lotes E/F, quadra 12, Caixa Postal 1001, CEP 79830-970, city of Dourados, MS
Latitude:	22°18'39" S
Longitude:	54°46'37" W
Region:	Southeast Region, State of São Paulo
Project location address:	Andradina – Estrada Municipal do Jaó, km 05 + 300 m, s/n, Estância Nossa Senhora Aparecida, Bairro Zona Rural, city of Andradina, SP
Latitude:	20°53'07" S
Longitude:	51°19'14" W

2.4 Technical Project Description

The project activity consists on the production of organic fertilizer through aerobically composting process using mainly solid waste coming from agro industrial activities residues. Additionally, small portions of municipality residual waste can be applied in the project scenario. The proposed project prevents the methane emissions that would in the absence of the project activity been generated by anaerobic decay of the residual waste that is being utilized by the composting process. The composting process followed in the plant is based on the application of a Biotechnological Catalyst Extract HSNI (mix of various microorganisms and patented under the Brazilian National Institute of Industrial Property with ID No. PI-0504277-1 A) and water to the residual waste. The received residual waste is immediately piled and mixed with the composting extract. To guarantee a minimum 10% content of Oxygen the pile will have limited height and be continuously turnover slowly. The aerobically biodegradation (composting process) of the waste during 15 to 21 days results in an organic fertilizer, which is sold in the market.

The technical key data are provided in tables 2-4a

Table 2-4a: Technical data of the project activity (Organoeste Dourados)

Equipment	Quantity
Carrier belt	3
Scale	1
Treadmills	1
Wheel loader	1

Table 2-4b: Technical data of the project activity (Organoeste Andradina)

Equipment	Quantity
Coffer-dam (packing machine)	1
Carrier belt	5
Scale	1
Treadmills	2
Wheel loader	1

3 METHODOLOGY AND VALIDATION SEQUENCE

3.1 Validation Steps

The validation of the project consisted of the following steps:

- Contract review
- Appointment of team members and technical reviewers
- Publication of the project design document (PDD)
- A desk review of the PDD /PDD/ submitted by the client and additional supporting documents with the use of customised validation protocol /CPM/ according to the Validation and Verification Manual /VVM/,
- Validation planning,
- On-Site assessment,
- Background investigation and follow-up interviews with personnel of the project developer and its contractors,
- Draft validation reporting
- Resolution of corrective actions (if any)
- Final validation reporting
- Technical review
- Final approval of the validation.

The sequence of the validation is given in the table 3.1 below:

Table 3.1: Validation sequence

Topic	Time
Assignment of validation	2008-08-21
Submission of PDD for global stakeholder commenting process	2008-11-07 to 2008-12-06
On-site visit	2009-12-08 and 2009-12-09
Draft reporting finalised	2009-04-06
Final reporting finalised	2009-10-20
Technical review on final reporting finalised	2009-10-20

3.2 Contract review

To assure that

- the project falls within the scopes for which accreditation is held,
- the necessary competences to carry out the verification can be provided,
- Impartiality issues are clear and in line with the CDM accreditation requirements

a contract review was carried out before the contract was signed.

3.3 Appointment of team members and technical reviewers

On the basis of a competence analysis and individual availabilities a verification team, consistent of one team leader and 4 additional team members, were appointed. Furthermore also the personnel for the technical review and the final approval were determined.

The list of involved personnel, the tasks assigned and the qualification status are summarized in the table 3-2 below.

Table 3-2: Involved Personnel

	Name	Company	Function [1)]	Qualification Status [2)]	Sectoral competence	Technical competence	Host country Competence	Controlling competence
☒ Mr. ☐ Ms.	Rainer Winter	TÜV NORD CERT, Germany	TL	SA	x	x	-	x
☒ Mr. ☐ Ms.	Pacheco, Fernando P.	TÜV NORD CERT, Brazil	TM	T	-	x	x	-
☐ Mr. ☒ Ms.	Guena, Ana Maria O.	TÜV NORD CERT, Brazil	TM	T	-	-	x	-
☐ Mr. ☒ Ms.	Inga Nagel	TÜV NORD CERT, Germany	TR*	A	x	-	-	-
☐ Mr. ☒ Ms.	Alexandra Nebel	TÜV NORD CERT, Germany	TR*	E	-	-	-	-
☒ Mr. ☐ Ms.	Eric Krupp	TÜV NORD CERT, Germany	FA	SA	x	x	-	x

*not part of the Validation Team

[1)] TL : Team Leader; TM : Team Member, TR: Technical review; FA: Final approval

[2)] GHG Auditor Status: A : Assessor; E : Expert; SA: Senior Assessor; T : Trainee; TE Technical Expert

Certificates of appointment for the above mentioned team members are enclosed in annex 6 of this report.

3.4 Consideration of Public Stakeholder Comments

Acc. to the modalities and procedures the draft PDD, as received from the project participants, has been made publicly available on the dedicated UNFCCC CDM website prior to the validation activity commenced. Stakeholders have been invited to comment on the PDD within the 30 days public commenting period.

In case comments were received, they are taken into account during the validation process. The comments and the discussion of the same are documented in annex 5 of this report.

3.5 Validation Protocol

In order to ensure consideration of all relevant assessment criteria, a validation protocol is used. The protocol shows, in a transparent manner, criteria and requirements, means of validation and the results from pre-validating the identified criteria. The validation protocol reflects the generic CDM requirements each CDM project has to meet as well as project specific issues as applicable. The validation protocol serves the following purposes:

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

The validation protocol as described in Figure 1.

Validation Protocol Table A-1: Requirement checklist				
Checklist Item	***Validation Team Comment***	***Reference***	***Draft Conclusion***	***Final Conclusion***
The checklist items in Table A-1 are linked to the various requirements the project should meet. The checklist is organised in various sections. Each section is then further sub-divided as per the requirements of the topic and the individual project activity.	*The section is used to elaborate and discuss the checklist item in detail. It includes the assessment of the validation team and how the assessment was carried out. The reporting requirements of the VVM shall be covered in this section.*	*Gives reference to the information source on which the assessmen t is based on*	*Assessment based on evidence provided if the criterion is fulfilled (OK), or a CAR, CR or FAR (see below) is raised. The assessment refers to the draft validation stage.*	*In case a corrective action or a clarification the final assessment at the final validation stage is given.*

Figure 1: Validation protocol tables

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

3.6 Review of Documents

The published PDD (version 1) and supporting background documents related to the project design and baseline were reviewed.

Furthermore, the validation team used additional documentation by third parties like host party legislation, technical reports referring to the project design or to the basic conditions and technical data.

3.7 Follow-up Interviews

The validation team has carried out interviews in order to assess the information included in the project documentation and to gain additional information regarding the compliance of the project with the relevant criteria applicable for CDM.

During validation the validation team has performed interviews to confirm selected information and to resolve issues identified in the document review. The main topics of the interviews are summarized in table 3-3.

Table 3-3: Interviewed persons and interview topics

Interviewed Persons / Entities	Interview topics
Project proponent representatives Project consultant	- Current status of plant design - Technical details of the project realization, project feasibility, designing, monitoring of the project

Interviewed Persons / Entities	Interview topics
	- Monitoring and measurement equipment and system. - Financial aspects - Crediting period - Project activity starting date - CER allocation / ownership - Baseline study assumptions - Additionality - Sustainable development issues - Monitoring - Analysis of local stakeholder consultation - Roles & responsibilities of the project participants w.r.t. project management, monitoring and reporting - National Legislation - Editorial issues of the PDD

A comprehensive list of all interviewed persons is part of section 7 ‘References’.

3.8 Project comparison

The validation team has compared the proposed CDM project activity with similar projects or technology that have similar or comparable characteristics and with similar projects in the host country in order to achieve additional information esp. regarding:

- Project technology
- Additionality issues
- Reasons for reviews, requests for reviews and rejections within the CDM registration process.

3.9 Resolution of Clarification and Corrective Action Requests

3.9.1 Definition

A **Corrective Action Request (CAR)** will be established where:

- mistakes have been made in assumptions, application of the methodology or the project documentation which will have a direct influence the project results,

- the requirements deemed relevant for validation of the project with certain characteristics have not been met or
- there is a risk that the project would not be registered by the UNFCCC or that emission reductions would not be able to be verified and certified.

A **Clarification Request (CL)** will be issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

A **Forward Action Request (FAR)** will be issued when certain issues related to project implementation should be reviewed during the first verification.

3.9.2 Draft Validation

After reviewing all relevant documents and taken all other relevant information into account, the validation team issues all findings in the course of a draft validation report and hands this report over to the project proponent in order to respond on the issues raised and to revise the project documentation accordingly.

3.9.3 Final Validation

The final validation starts after issuance of the proposed corrective action (CA) of the CARs CLs and FARs by the project proponent. The project proponent has to reply on those and the requests are “closed out” by the validation team in case the response is assessed as sufficient. In case of raised FARs the project proponent has to respond on this, identifying the necessary actions to ensure that the topics raised in this finding are likely to be resolved at the latest during the first verification. The validation team has to assess whether the proposed action is adequate or not.

In case the findings from CARs and CLs cannot be resolved by the project proponent or the proposed action related to the FARs raised cannot be assessed as adequate, no positive validation opinion can be issued by the validation team.

The CAR(s) / CL(s) / FAR(s) are documented in chapter 4.

3.10 Technical review

Before submission of the final validation report a technical review of the whole validation procedure is carried out. The technical reviewer is a competent GHG auditor being appointed for the scope this project falls under. The technical reviewer is not considered to be part of the verification team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the validation opinion and the topic specific assessments as prepared by the validation team leader may be confirmed or revised. Furthermore reporting improvements might be achieved.

3.11 Final approval

After successful technical review of the final report an overall (esp. procedural) assessment of the complete validation will be carried out by a senior assessor located in the accredited premises of TÜV NORD.

Only after this step the request for registration can be started (in case of a positive validation opinion).

4 VALIDATION FINDINGS

In the following table the findings from the desk review of the published PDD, visits, interviews and supporting documents are summarised**:**

Table 4-1: Summary of CARs, CLs and FARs issued

Validation topic [1)]	No. of CAR	No. of CL	No. of FAR
General description of project activity (A) - Project specification - Technical project description - Participation - Contribution to sustainable development - PDD editorial aspects - Technology to be employed	0	5	0
Project Baseline, Additionality and Monitoring Plan (B) - Application of the Methodology - Project Boundary - Baseline identification - Calculation of GHG emission reductions Project emissions Baseline emissions Leakage - Additionality determination - Monitoring Methodology - Monitoring Plan - Project management planning	7	6	0
Duration of the Project / Crediting Period (C)	1	1	0
Environmental impacts (D)	0	0	0
Stakeholder Comments (E)	1	0	0
SUM	**9**	**12**	**0**

[1)] The letters in brackets refer to the validation protocol

The following tables include all raised CARs, CLs and FARs. For an in depth evaluation of all validation items it should be referred to the validation protocols (see Annex 1).

The findings of validation process are summarized in the tables below.

General	**Finding CL A1**		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	The milestones of the project are incomplete. Please provide in section B.5 a transparent table with all steps of the project incl. also board decision, start of installation/construction, start of operations. Make clear why the receipt of installation licence is the staring date of the project activity and not the start of installation as per guidance for completing the simplified PDD.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	Before the Installation License, in Brazil, all new facilities must have already had an Environmental Previous License, which states several measures to be undertaken by the company to start the construction of the new facility. It is difficult to prove the purchase of equipments or the actual start of installation of equipments because Organoeste builds its own equipments. The Installation license shows the concrete intention of the company to build the unit and is a conservative date because it is normal to purchase all equipments after the issuance of the environmental installation license, as it sometimes can take a good amount of time to be issued. This information was inserted in the PDD, as well as a table with all milestones of the project. The PDD was updated as a result of this request.		
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	CL closed. The PDD was reviewed on section B5 with regard to the project milestones and starting date issues mentioned on the rose CL. All requested information was properly included on updated PDD.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements		

General	**Finding CL A2**		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	When consulting google maps the coordinates for Dourados and Andradina are not very precise. Please revise and give site specific coordinates in section A.4.1.4 of PDD. Moreover it is necessary to include the zip code (CEP) on the information about the Organoeste Dourados and Andradina address.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The zip code was included in the PDD. The GPS coordinates were revised. It was wrong due to the imprecision of the GPS equipment used and degree of clouds at the day the coordinate was taken. The PDD was updated as a result of this request.		

General	Finding CL A2
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Ok, the correct coordinates were included in the PDD as well as the correct zip-code.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

General	Finding CL A3		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	During on-site visit it was questioned by the validation team how much time is necessary to prepare the fertilizer compost. The answer was that considering the weather, mainly rainy periods, the preparation time is between 15 to 21 days. In PDD section A.4.2 it is mentioned that the process occurs in 10 to 15 days, thus clarification is necessary.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	Initially, the company was making tests that indicated the time of 10 to 15 days in order to get the compost ready. However, due to the variety of residues they compost, they believe it is safer to make this process in 15 to 21 days. By doing this, they can guarantee that all residue is properly composted. The PDD was updated as a result of this request.		
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	The compost preparation time is now clarified. The longer period has found to be safer with regard to finalizing the composting process without having any decomposed materials left. Therefore the new time span is accepted by the validation team. The PDD has been revised accordingly.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements		

General	Finding CL A4		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	Please, clear indicate the status of Ecocert certification process of the plant in the PDD. Has the plant already acquired the certificate or it is still under process of certification? Moreover it is necessary to send the installation license of Organoeste Dourados.		

General	**Finding CL A4**
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	Dourados already have EcoCert certification. The environmental installation license was sent to the validation team. Both information were available during the validation site visit.
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	The answer provided for the Dourados plant is insufficent. Please provide further explanation on the EcoCert certification instead of the environmental installation license. Moreover it is necessary to provide information with respect to the EcoCert certification for Andradina plant.
Corrective Action #2 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	Andradina also has EcoCert certification. However, the certification expired last year and there were no need to renew it. However, they are seeking renewal now and will start this process soon. The expired certificate will be sent to the validation team.
DOE Assessment #2 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	OK, sufficient information was provided to validation team. The CL is closed.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

General	**Finding CL A5**		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	In the bibliographic references of PDD the sources EPA (1993), EPA (1995), IPT (2000), Silva F.C. (2005) and Silva F.C. (2006) could not be properly assessed as the website provided only presents the abstract of the source or the document was not available to the validation team during on-site visit. It is necessary to send evidences of the sources above to the validation team. Additionally, the name the author Barreira, L.P. (2005) is written wrong. This thesis is available in digital format from USP (University of São Paulo) electronic library. Please, include the website of the source.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The EPA references' links were checked and none were broken. However, these references were removed from the PDD because they were not cited in the text. IPT (2000), Silva (2005) and Silva (2006) were sent to the validation team.		

General	Finding CL A5
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Ok, the PDD sources were corrected on PDD. All necessary evidences are included in the PDD. The literature has been checked with information given in the PDD no further inconsistencies have been observed.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☐ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

General	Finding CAR B1		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	It is necessary to include all methodological applicability criteria to the project scenario in section B.2.The paragraphs 1, 2, 3, 4, 5, 7, 8 and 9 of the methodology must be addressed in PDD. Moreover, please provide more detailed information on PDD if the plant applies residual waste coming from biological treatment processes on its composting process?		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	All methodological applicability criteria were included in the PDD. The PDD was updated as a result of this request.		
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Ok, all methodological applicability criteria was properly justified on section B.2 of reviewed PDD. Additionally, it was clarified on PDD the non-use of residual waste coming from biological treatment process.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☐ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements		

General	Finding CAR B2		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	According to section A.4.2 of the PDD thermal treatment occurs during sterilization in the composting process, thus provision in AMS III.E related to the thermal treatments shall be applied. Moreover, if applicable, the project boundary in section B.3 of PDD should contemplate the place where the thermal treatment occurs.		

General	Finding CAR B2
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The process that this project activity uses to treat the organic matter is aerobic composting. The temperature reached in aerobic composting (if done properly) can sterilize the residue, if maintained for a long period of time (several hours). However, there is no thermal treatment of the organic waste. The waste is aerobically composted. The reaction that happens is entirely natural. There is no need to apply provision for thermal treatments.
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	It was clarified that thermal treatments does not occurs. The composting process is enough to increase the temperature necessary for the sterilization mentioned on section A.4.2.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The project complies with the requirements

General	Finding CAR B3		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	In section B.6.3 of the PDD the first formula given is wrong according to the applied methodology. The parameter $PE_{y,transp}$ appears twice and one of them should be replaced by $PE_{y,power}$. Correction is necessary.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The double $PE_{y,transp}$ mistake was corrected by changing the second one into $PE_{y,power}$ The PDD was updated as a result of this request.		
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Ok, PDD was correctly revised. The formula is now inline with the methodology.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☐ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements		

General	Finding CAR B4		
Classification	☒ CAR	☐ CL	☐ FAR

General	**Finding CAR B4**
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	According to Brazilian DNA rules the parameter CEF_{elec}, requests the use of data made available from Brazilian DNA website. Revision of the parameter including information with regard to the values applied is necessary.
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The data from Brazilian DNA, which is available on Brazilian Science and Technology Ministry (MCT) website, is indeed used. However, ex-ante calculation is used, and not ex-post calculation. The spreadsheet with the CEF_{elec} calculations will be sent to the validation team.
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	The parameter was reviewed and the calculation spreadsheet could be properly assessed.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☐ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

General	**Finding CAR B5**		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	The values used for the parameter EF_{CO2} are different in PDD and the calculation spreadsheet, thus revision is necessary.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The stepwise calculation of this parameter can be found in the spreadsheet calculation, where all formula used can be clearly viewed. The value from the spreadsheet calculation is the correct one, therefore the PDD was corrected. The PDD was updated as a result of this request.		
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	OK, the PDD was reviewed accordingly. The EF_{CO2} applied is the correct one.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☐ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements		

General	**Finding CAR B6**

General	Finding CAR B6		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	Following monitored parameters are missing in the monitoring plan: $MD_{y,reg}$, DAF_w, soil application of the compost (foreseen in methodology paragraphs 30 and 33), $W_{x,}$ $pn_{j,x}$, z (foreseen in methodological tool) and run of water (as per B.7.2 of PDD). Moreover, it is necessary to include in section B.6.2 of PDD the parameter GWP_CH_4 Global warming potential Methane and DOCj, kj, EFcomposting: Explain why the wet waste value needs to be applied.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	$MD_{y,reg}$ → There is no regulation obliging to burn methane. As stated in the methodology, this data should be monitored "where applicable" and it is not applicable in this situation. However, MDy,reg was included in the monitoring section B.7.1. Parameters Soil application of the compost, DAF_w, $W_{x,}$ $pn_{j,x}$, z were inserted in section B.7.1. and detailed. DAFw will be calculated ex-post. Detailed information was provided in the monitoring sections for the mentioned parameters. As the wastewater will be included in the composting process (as part of the technology) and no methane emission is foreseen from this source, the preventive monitoring was further described in the Monitoring Plan (section B.7.2). According to the PDD, ", it is not expected that this runoff water will generate project emissions due to the short storage period in the collection system and also due to the fact that the runoff water will be returned to the composting pile". A monitoring protocol will be developed to monitor de runoff water at the beginning of the crediting period. Monitoring sections in the PDD updated. The PDD was updated as a result of this request.		
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Ok, all requested information was included on the reviewed PDD. The monitored parameters are now dully filled on PDD. Despite of that, please note that for the parameters ($Q_{y,ww,runoff}$ and $COD_{y,ww,runoff}$) related to run of water monitoring needs to be properly evaluate during the first verification process. According to the PDD a final protocol will only be developed during the beginning of the crediting period in order to evaluate the amount of water in the collection system. If any further action will be taken with regard to the above information, a FAR must be opened to check the implementation of the equipment during the initial verification.		
Corrective Action #2 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The PDD was updated as a result of this request.		

General	Finding CAR B6
DOE Assessment #2 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	The monitored parameters $Q_{y,ww,runoff}$ and $COD_{y,ww,runoff}$ were reviewed on section B.7.1 of PDD. The measurement methods and QA/QC procedures were properly described. The CAR was sufficiently closed without any further necessary action to be taken by PP.
Conclusion *Tick the appropriate checkbox*	☒ To be checked during the first periodic verification ☐ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

General	Finding CAR B7		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	Revision of parameters table in section B.7.1 of PDD are necessary regarding the following issues: 1) Parameter Q_y and $Q_{y,treatment}$: Explain the approach of representative sampling. Explain the stipulations/recommendations of the weighbridge/scale supplier with regard to maintenance and calibration. Additionally it is necessary to include detailed information on how the composition of the solid waste received and final product respectively will be determined. 2) Parameter CT_y and $CT_{y,treatment}$: Why is the capacity of the trucks so different? 3) Parameter EG_{PJFFy}: Who is exactly the owner of the meter? Who is the electricity supplier? Provide a meter identification number. What is meant by the national standard with regard to calibration? 4) Make sure that for each parameter monitored a QA/QC procedure is given, especially for the parameters $DAF_{treatment}$, Aerobic conditions' parameters and Disposal practices of the waste. 5) It is necessary to inform the monitoring frequency of the parameters: Q_y, CT_y, $CT_{y,treatment}$ and $EG_{PJ,FF,y}$. 6) It is necessary to describe detailed information regarding the measurement method for the Aerobic conditions' parameter. What kind of tests will be performed? 7) For the monitored parameter Qy it is stated that the average incremental distance for waste transportation is not expected to be significant, thus this value will not be considered in the emission reduction calculation. This approach is not conservative and should be avoided. Please clear evidence to validation team and include detailed information on PDD why the incremental distance can be disconsidered.		

General	Finding CAR B7
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	Answer to point 1) The sampling explanation is given by adding the monitoring parameters as requested by CAR B7. Information relating to the sampling of the waste can be found in the monitoring sections, e.g. in Pn,j,x. There is no need to monitor the composition of the final compost, only the waste need its mass percentage monitored. Answer to point 2) In CT_y, the transport is client's responsibility. In $CT_{y,treatment}$, the transport is Organoeste's responsibility. Answer to point 3) The owner of the meter and electricity supplier is the electricity concessionaire from the state. In this case, is the Espírito Santo Centrais Elétricas S/A (ESCELSA). The national standard must be followed by the concessionaire with respect to the meters and is established by ANEEL. Normally, the national standard is to calibrate the meter once every three years, but the project developer does not have access to the calibration certificates, as it is totally under the concessionaire responsibility. Therefore, as the concessionaire will be in charge of this, the project developer will assume that the meter is correctly calibrated. Answer to point 4) The description of the parameters was updated in order to show the QA/QC expected for each one. The PDD has now the most detailed description possible for the referred parameters. Answer to point 5) Monitoring frequency of Qy (as described in the PDD): "weighing each truck in the entrance of each unit." / Monitoring frequency of CTy (as described in the PDD): "All trucks will be weighted by calibrated scale in the entrance of the unit." / Monitoring frequency of $CT_{y,treatment}$ (as described in the PDD): "All trucks will be weighed by a calibrated scale in the entrance of the unit." / Monitoring frequency of $EG_{PJ,FF,y}$. (updated in the PDD): The monitoring will be continuous and the data will be reported monthly. Answer to point 6) Basically, the height and length of each pile, its composition and frequency of turns will be monitored in order to assure its aerobic degradation. During the beginning of the first crediting period, a campaign of oxygen monitoring will be conducted in order to evaluate if the composting process is indeed being aerobic. It will be used a calibrated specialized equipment to monitoring oxygen inside composting piles. The PDD has now the most detailed description possible for the referred parameters. Answer to point 7) The parameter DAFw was updated to reflect the request.

General	Finding CAR B7
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Ok, all requested parameters were correctly reviewed and sufficient information has been included in the PDD to assure the correct implementations of the monitoring plan.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☐ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

General	Finding CL B1		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	It is necessary to include the sources of the following statements through the PDD: 1) Section B.5, Investment Barrier: common practice for Brazilian consumers preferably for mineral fertilizers. 2) Section B.6.1: “the final product has little to no amount of decomposing matter left”.		

General	**Finding CL B1**
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	Answer to point 1) As stated in the PDD, "The consumers of fertilizers in Brazil tend to buy mineral fertilizers, a product backed by a massive marketing campaign and that they have been using for the last several decades, with very positive results. Bearing in mind all the economic and social problems in Brazil, convincing the consumer that a new expensive product is better than a product they are already accustomed to use is a very difficult task." The agricultural sector in Brazil is a very traditional sector, where it is extremely difficult to bring something new into it. Therefore, trying to sell a new product to traditional farmers is indeed not easy. They prefer the mineral fertilizer because they are already accustomed to it for decades. This is also explained in the PDD. There is no source that can be cited, the information is based on personal researches and observations, as well as actual common practice from the market and information given by the project developer. Answer to point 2) The composting process itself aims to mineralize the organic matter, making it available to be absorbed by plants. There is no way the compost could work as a good fertilizer if the organic matter was not entirely mineralized. Therefore, concept of the Organoeste technology is based in this fact: no decomposing matter is left in the compost because all organic matter was decomposed in order to be available for plants. It can be easily verified by checking that the ready compost has little smell (similar to soil) and also the C/N ratio – extensively researched by the company and also a very important data that clients seeking for fertilizers like to check. There is no source that can be cited, but all researches with Composting will mention it, and the success of the company is also depending on it.
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Point 1 has been conclusively explained. The validation team agrees that it might be hard convincing farmers to go away from their traditional behaviour. The same has been observed during other projects involving rural settings. Point 2 the explanation is conclusive and can be accepted by the validation team as this statement could be observed at the moment of on-site visiting of both plants of the proposed project.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

General	**Finding CL B2**		
Classification	☐ CAR	☒ CL	☐ FAR

General	**Finding CL B2**
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	In PDD section B.4, assessment of alternatives, alternatives 3 and 4, second paragraphs it is necessary to provide the sources of information given. Additionally, please give a reference for the data mentioned in the table with values of ANEEL and PROINFA program. Include the full reference in the Reference table of the Annex.
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The sources were inserted in the PDD, as requested.
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Ok, PDD was revised accordingly.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☐ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

General	**Finding CL B3**		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	The PDD section B.5 mentions that the negotiations between project developer's and interested personnel started on 2004 and that the beginning of contractual negotiations was before 2006-08-14; before the project starting date. It is necessary to evidence to the validation team the above mentioned negotiation, the project starting date and the date of decision taken to proceed with the proposed project activity regarding the previous CDM consideration issue. More detailed information should be presented in the PDD.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The contractual negotiations started on 14/08/2006, but since 2004 Organoeste was on conversations with EcoSecurities. The initial idea was to establish a partnership, where EcoSecurities would enter as investor on the project. However, the financial conjunctures of the companies, at that time, did not allow this intention to go any further. There were several meetings between EcoSecurities directors and Organoeste directors. Unfortunately, at that time, they were not concerned on making records of these meetings. Both companies were very small. Later, after the meetings lead to conversations on doing a simple CDM project together, e-mails were exchanged between both companies in order to check if a CDM project was indeed feasible. These e-mails (before 2006) were lost. Therefore, the first contact that can be traced is the one from 2006. The actual operation of this project is around this date or later. Additional information was inserted in section B.5.		

General	Finding CL B3
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Despite of all provided explanation by PP, the early consideration of CDM (before starting date) could not be evidenced to the validation team by any document. Therefore, CL remains opened. Please, provide to validation team substantial evidence regarding the serious CDM consideration before the starting date of the project. The last reviewed PDD mentions that the beginning of contractual negotiations occurred before the project starting date, but it lacks of supporting document/reference. Thus, the answer provided is not conclusive.
Corrective Action #2 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	Please refer to the Register Meeting dated 2004/02/14 and engineer Marcos Duarte declaration attached to this response.
DOE Assessment #2 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	The register Meeting evidence could be properly assessed by the validation team. It was evidenced the PP's intention to proceed with the CDM implementation at the project site, Moreover, the CDM incentive was seriously considered before the project stating date 2006/04/11) and evaluated as essential for the project implementation by Organoeste Franchising Board/RM/.Considering EB 49 Annex 22, paragraph 6(b), the PP must indicate that continuing and real actions were taken to secure the CDM status for the proposed project in parallel with its implemantation. Making use of paragraph 8(b) of the same document, the DOE considers that the continuing and real actions necessary to the CDM implementation were performed by Organoeste Board, which could be assessed by interview approach with an ex Dourados politician/IM01/ and a declaration from an engineer/ED/ which was consulted by Organoeste Franchising at the time of initial project consideration. Both evidences above affirms that the CDM incoming was always considered as essential for the project implementation, that participates on Organoeste Board and interests initails investors reunions during the intire year of 2004 and where consulted by Organoeste Board w.r.t the project sustainability and carbon credits revenues. Therefore, the validation team concludes that previous CDM consideration was seriouly and continuos considered by the PP.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☒ The project complies with the requirements

General	Finding CL B4		
Classification	☐ CAR	☒ CL	☐ FAR

General	**Finding CL B4**
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	Please give more detailed information regarding the non methane emissions due to disposal/storage of waste/product. Are there any wastes of the composting process? If so, how is it handled? What about the final products, it is presented as a financial barrier that the composting product is not very easy to be sold. Considering that, it is possible that the final products will be stored for a certain period? If so, methane emission may occur and it should be assessed as a valid source of GHG during the project activity. Additionally, it is said in PDD that the final product has little to no amount of decomposing matter left. How can this be evidenced?
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	As stated in the PDD, "The consumers of fertilizers in Brazil tend to buy mineral fertilizers, a product backed by a massive marketing campaign and that they have been using for the last several decades, with very positive results. Bearing in mind all the economic and social problems in Brazil, convincing the consumer that a new expensive product is better than a product they are already accustomed to use is a very difficult task." The agricultural sector in Brazil is a very traditional sector, where it is extremely difficult to bring something new into it. Therefore, trying to sell a new product to traditional farmers is indeed not easy. They prefer the mineral fertilizer because they are already accustomed to it for decades. This is also explained in the PDD. There is no source that can be cited, the information is based on personal researches and observations, as well as actual common practice from the market and information given by the project developer. The composting process itself aims to mineralize the organic matter, making it available to be absorbed by plants. There is no way the compost could work as a good fertilizer if the organic matter was not entirely mineralized. Therefore, concept of the Organoeste technology is based in this fact: no decomposing matter is left in the compost because all organic matter was decomposed in order to be available for plants. It can be easily verified by checking that the ready compost has little smell (similar to soil) and also the C/N ratio – extensively researched by the company and also a very important data that clients seeking for fertilizers like to check. There is no source that can be cited, but all researches with Composting will mention it, and the success of the company is also depending on it.
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	The CL B4 was similar to CL B1. The information is similar and can therefore be accepted in both cases.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

General	Finding CL B5		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	In PDD section B.6.1, project emissions, says that the project utilizes fossil fuel for turning over the compost among other things. Please clarify what are the others use for the fossil fuel in the project activity.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	Fossil fuels are used in tractors inside the composting unit. Activities that are done using these tractors are: turning the piles, spraying the bacteria, adjusting the position of the waste, among others. But each unit has a control of all fossil fuel purchased to be used inside the unit, and it will be properly monitored.		
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Ok, information on the fossil fuel usage was provided and the monitoring of the use of fossil fuel is properly addressed in the monitoring plan.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☒ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements		

General	Finding CL B6		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	According to EB 35 Annex 34 an investment barrier is applicable showing that a financially more viable alternative to the project activity would have lead to higher emissions. To show this, an investment analysis is necessary. The content of your barrier would be an “Access to finance barrier”. Please, correct also the summary table on page 19.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	It was changed, in the last version of the PDD, the name of the barrier from "investment" to "finance". If you could please check the PDD you can see that I've already considered the validation comments and changed the PDD accordingly.		

General	Finding CL B6
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Ok, the PDD was reviewed correctly and the "access to finance barrier" is now properly addressed as "finance barrier". The content of this barrier shown on PDD could be properly assessed by the validation team. The project faces financial difficulties with regard to the compost selling and financing obtaining. Mainly, because of the market common practice while buying mineral fertilizer, instead of organic as produced on the project activity, and the fact that the developer company is significantly small and simple, which difficult the possibility of arrange financing partners, respectively. Additionally, an investment analysis is not necessary for the project proof of additionality. Please refer to table A-4 for detailed assessment of the project barriers.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☐ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

General	Finding CAR C1		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	In section C.1.1 of PDD it is mentioned that the starting date of the project activity (2007-07-01) was determined applying the starting of test operation of Organoeste plant, first composting plant, however it is necessary to send to the validation team the documents (both companies) which prove the starting date of the project activity. Moreover, in section C.2.1.1 the starting date of the first crediting period must be changed to a more realistic date. 01.07.2009 is too early for registration. The tables of emission reductions must be changed accordingly (B.6.4 and A.4.3 and Excel). Additionally, it has to be considered in the final emission reduction calculation the starting date of the crediting period, which is later than 01/01/2009 (and later than proposed 01/07/2009). So the emission reductions must be proportionate to the rest of the year 2009 and the beginning of the last year of the crediting period.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	The starting date and conservative assumption of point of no return of the project activity is considered as the Environmental Operational License for Dourados unit (11/04/2006). The explanation for using this date is given in section B.5 of the PDD. Additionally, starting date of the first crediting period changed to 01.07.2010 and sections B.6.4, A.4.3 and excel sheet were changed accordingly.		
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Ok, PDD has been revised accordingly. The starting date of crediting period was reviewed and supporting evidence for the starting date of the project activity was provided and found to be acceptable. The excel sheet has also been corrected.		

General	**Finding CAR C1**
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☐ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

General	**Finding CL C1**		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	It is necessary to evidence to validation team the data/document available to estimate the operational lifetime of the project activity as 21 years as per PDD section C.1.2.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	As could be evidenced by the validation team during site visit, the composting site uses a small number of equipments. The few equipment used are simple and can be maintained with low cost maintenance. Thus, he expected lifetime of the composting unit is higher than the entire renewable crediting period (i.e. 21 years). The core business of the company is to sell compost and the project developer, therefore, will need to operate the unit for the longest time possible.		
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	OK, as all equipments used in the project activity are mainly vehicles for handling the waste/compost for turnover and transportation the validations team can assume that the entire renewable crediting period is within the equipments lifetime or the equipment can be repaired or replaced easily.		
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☐ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements		

General	**Finding CAR E1**		
Classification	☒ CAR	☐ CL	☐ FAR
Description of finding *Describe the finding in unambiguous style; address the context (e.g. section)*	It is necessary to send to the validation team the evidence on Stakeholder consultation stated in section E.1 of the PDD.		
Corrective Action #1 *This section shall be filled by the PP. It shall address the corrective action taken in details.*	Stakeholders' consultation was performed as required by the Brazilian DNA regulations. The proof of stakeholder consultation was sent to the validation team.		

General	**Finding CAR E1**
DOE Assessment #1 *The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.*	Ok, the Stakeholder consultation process was properly assessed by the validation team. All invitation letters and its receipt of conformation were evidenced.
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the first periodic verification ☐ Appropriate action was taken ☐ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

5 VALIDATION ASSESSMENT SUMMARY

5.1 General Description of the Project Activity

5.1.1 Participation

LOA

In accordance with the CDM M&P at the stage of validation a Party involved may or may not have provided its approval at the time of making the PDD public. The approval of the parties involved is required at the time of requesting registration.

At the time of the completion of this draft-report the LoA is pending for both parties involved, Brazil (host country) and United Kingdom of Great Britain and Northern Ireland (Annexure I country). For the Brazilian DNA a positive validation opinion is a prerequisite for the host government approval and thus the LoA cannot be considered at the present validation stage. The request for registration will not be submitted before it has been issued by the DNA.

Project Participants

Brazil, the host country, has ratified the Kyoto Protocol on 23rd August 2002. The Brazilian DNA assigned for CDM is the "Global Climate Change international Commission".

United Kingdom of Great Britain and Northern Ireland has ratified the Kyoto Protocol on 31th May 2002 and is listed as an Annexure I Party. The United Kingdom of Great Britain and Northern Ireland DNA assigned for CDM is the "Global Carbon Markets".

The parties involved in the project activity are Brazil (Host Party) and United Kingdom of Great Britain and Northern Ireland.
The project participants are:

1. Organoeste Franchising Ltda. (Brazil)
2. EcoSecurities International Limited (United Kingdom of Great Britain and Northern Ireland)

All information provided in section A.3 and Annex 1 are consistent.

5.1.2 Contribution to Sustainable Development

The Brazilian DNA has not yet issued the LoA, in which the contribution to sustainable development is addressed and confirmed. According to DNA's rules, a positive validation opinion is a pre-requisite to issue a LoA. Please refer to topic A.1.1

Despite of that, the view of the project participants on the contribution of the project activity towards sustainable development is briefly described in section A.2. of the PDD. The project contribution for sustainable development could be positively assessed as:

- it reduces the GHG emission caused by decomposition of solid waste;
- it contributes to the appropriate disposal of the waste;
- it increases the re-use of the land in the landfill;
- in contributes to diminish the pollution of air and water;
- as it is an organic product is less harmful to the environment;
- it increases the offer of jobs and income generation.

5.1.3 PDD editorial Aspects

The CDM PDD completing Guide form version 3 was applied. The PDD has in general been filled in accordance with the PDD guidelines. Nevertheless CARs and CRs are issued in order to improve the PDD: please refer to section 4 of this report.

5.1.4 Technology to be employed

The proposed project prevents the methane emissions that would in the absence of the project activity been generated by anaerobic decay of the residual waste that is being utilized by the composting process. The composting process followed in the plant is based on the application of a Biotechnological Catalyst Extract HSNI (mix of various microorganisms and patented under the Brazilian National Institute of Industrial Property with ID No. PI-0504277-1 A) and water to the residual waste. The received residual waste is immediately piled and mixed with the composting extract. To guarantee a minimum 10% content of Oxygen the pile will have limited height and be continuously turnover slowly. The aerobically biodegradation (composting process) of the waste during 15 to 21 days results in an organic fertilizer.

The technology used to do the composting reflects good practices. The Biological Catalyst Extract HSNI, has patent registered in INPI (National Institute of Industrial Property from Portuguese Instituto Nacional de Propriedade Industrial) under number PI0504277-1 A. It was checked in INPI website and the product register ID could be properly assessed.

The good practice of this project design is the use of the solid organic waste to produce organic fertilizer, decreasing the quantity of residues in landfills.

Moreover, during the visit it was related to validation team that the Organoeste Andradina was the first unit of the franchising. All the system of the operation was development in this site. After a period of test, the knowledge was transmitted to Organoeste Dourados.

The operation depends on the material waste receiving, the waste composition, the pile height and the turn over. The wheel loader operator has a licence to drive this machine and the other employees received suit training.

As the composting process is repetitive over the time, the training regarding the operation is made when there is a new waste received and when there is a new staff admission.

Organoeste Dourados has a maintenance procedure to the wheel loader that was provided by the manufacturer (Caterpillar, SBPU6290, dated February 1990) and the technical report issued by Ipiranga, named Ipiranga CT/ver.03, dated 2002-03-15. The maintenance process of the Organoeste Andradina, consists in to grease bearings and alignment of belts. For this issue, there is no procedure documented.

5.1.5 Small Scale Projects

The project was qualified as small scale because its emissions reductions annual are smaller than 60 $ktCO_2$, according to defined methodology AMS-III.F. The project activity applies the small scale methodology AMS-III.F and all predicted tools (Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site", Version 4). For calculations of Grid Emission Factor, **Error! Reference source not found.**, the project refers to AMS-I.D. (Grid connected renewable electricity generation), Version 14, Valid from 31 Jul 09 onwards. For its part, AMS-I.D. refers to the "Tool to calculate the emission factor for an electricity system", Version 1.1.

Additionally, the proposed project is not a de-bundling of a CDM project activity. Although both companies have similar proposed project activities, any de-bundling could be observed as the project sites are different and the distance between them is greater than 1 Km.

5.2 Project Baseline, Additionality and Monitoring Plan

5.2.1 Application of the Methodology

The methodology applicable to the project activity is AMS-III.F, version 8, valid from 2009-07-31 onwards. Following the criteria of methodology AMS-III.F (please, refer to methodological paragraphs):

1 the project activity avoid emission of methane to the atmosphere once that use the solid waste that would have otherwise been left to decay anaerobically in a disposal site. And there is a biological control treatment through aerobic composting and proper soil application;

2 the project will not recover or combust landfill gas and undertake controlled combustion of the waste;

3 the emission reduction is smaller than 60 Kt CO2e;

4 this project activity is applicable because it makes a treatment in the waste from municipal solid residues and agro industrial activities;

5 it is a new facility. Therefore, is not necessary to demonstrate this criterion;

6 it is uses a solid waste how raw material, but it is not a co-treatment. Thus, this criterion can be disregard;

7 the location and characteristics of the disposal site of the biomass in the baseline are known.

For the criterions predicted on paragraphs 8, 9, 10, 11, 12, 13, 15 and 15 of the applicable methodology please refer to rose CAR B1, B2 and CL B4.

5.2.2 Project Boundary

The project boundary is clearly defined as Dourados and Andradina landfills, the composting units, the clients that buy the compost and the itineraries between these places. The Organoeste Andradina address is Estrada Municipal do Jaó, km 05 + 300 m, s/n, Estância Nossa Senhora Aparecidam Bairro Zona Rural, in the municipality of Andradina, State of São Paulo, Brazil. And Organoeste Dourados address is Avenida Quatro, s/n, Lotes E/F, Quadra 12, Caixa Postal 1001, CEP 79830-970, in the municipality of Dourados, State of Mato Grosso do Sul, Brazil. Despite of that please refer to rose CL A2 on section 4 regarding the geographical coordinates of the plants.

In section B.3 of the PDD the sources in the project boundary are given. Generally these sources are in compliance with the applied Methodology as well as with the real situation. This could be validated by reviewing the PDD and AMS-III.F and during the visit of the site.

5.2.3 Baseline Identification

Please refer to table A-2 for a detailed assessment of the baseline identification.

Four baseline scenarios have been considered:

- Uses the solid waste to produce organic fertilizer without the CDM.
- Disposal of the solid waste in a landfill (Andradina and Dourados municipal landfills), continuation of common practices.
- Disposal of the solid waste in a landfill that the captured gas is flared, without generation electricity or heat.
- Disposal of the solid waste in a landfill where the gas is captured and flared to generation of electricity.

In the course of document review it could be validated that no other alternatives for this project activity. The first scenario was identified as the baseline for the proposed project activity: uses of the solid waste to produce organic fertilizer through composting process without the CDM project implementation.

All available data necessary for the BL identification and the reference used in PDD could be evidenced. However, please refer to rose CL B1 and B2 on section 4 of this report. The BL identification is according to relevant national and sectoral policies.

5.2.4 Calculation of GHG Emission Reductions

The emission reductions are real, measurable and give long-term benefits related to the mitigation of climate change. In the course of validation of the baseline determination, monitoring apporach, ER calculation including respective input values have been reviewed. Althought some CARs and CLs have been raised, the emission reductions answer the methodology request. Despite of that please refer to topic B.5.1.

Project Emission:

For the proposed project activity six different types of GHG sources was identified according to the applied methodology:

- CO2 emission from fossil fuel usage in both composting plant. The vehicles used mainly for the compost turning over process, among others activities, will maintain its fuel consumption recorded for the project PE calculation. The specific CO2 emission factor of the fuel is *ex-ante* validated;

- CO2 emission from incremental transportation distances between the waste being delivered on the project plants, instead of the municipal landfills;

- CO2 emission from incremental transportation distances between the place of the soil application of the compost when sold by the project plants, instead of the local common practice (mineral fertilizers);

- The methane emission form the composting process is monitored during the project activity. Despite of the composting process monitoring to guarantee an aerobic composting condition, methane emission during the process still occurs;

- Methane emission from run-of-water of the composting process. As it could be evidenced during on-site visit, the run-of-water is re-used on future cycles of the composting process. The discharged water is re-used for dilution of the biocatalyst used in the following compost pile. Despite of that, the run-of-water is being monitored and if applicable, project emissions will be included in the ER calculation;

- Methane emission due to the disposal under anaerobic condition of the final compost product. During site visiting it could be observed that the composting plants presents low level of odour emission and that for a final better quality of the

organic fertilizer it is important to practically completely decay the initial waste, which provides sufficient evidence to exclude this PE of the project ER calculation. Moreover, as the plant faces significant selling difficulty on the market common practice, the average internal production is planned to work with practically no storage of the final products.

Baseline Emission:

The baseline emission are calculated as the methane emission due to the total waste received on both composting plants that would be, in the absence of the project activity, be delivered to unmanaged municipal landfills. According to Brazilian Laws and Legislation, no methane treatment is requested for the operation of landfill in the host country. The corrected toll predicted under the applied methodology was correctly applied ("Toll to determine methane emissions avoided from disposal of waste at a solid waste disposal site" version 4). During on-site visit the waste composition and total quantity delivered on both plants could be properly assessed, through internal records.

Leakage Emissions:

No leakage emission is predicted to occur during the project activity. The technology introduced is not transferred to or from another project activity. Thus leakage can be ignored.

Despite of that, please refer to rose CAR B3 and B5.

5.2.5 Additionality Determination

Consideration of CDM in decision making (if project start before validation)

As the project starting date (2006/04/11), defined as the Operational License issuance, is before the PDD publication for Global Stakeholder consultation, the PP shall demonstrate that the CDM was seriously and continuous considered prior to the project implementation.

As a result of this request, a Register Meeting document dated 2004/02/14 could be properly assessed by the validation team. It was evidenced the PP's intention to proceed with the CDM implementation at the project site, Moreover, the CDM incentive was seriously considered before the project stating date and evaluated as essential for the project implementation by Organoeste Franchising Board/RM/. Considering EB 49 Annex 22, paragraph 6(b), the PP must indicate that continuing and real actions were taken to secure the CDM status for the proposed project in parallel with its implemantation. Making use of paragraph 8(b) of the same document, the DOE considers that the continuing and real actions necessary to the CDM implementation were performed by Organoeste Board, which could be assessed by

interview approach with an ex-Dourados politician/IM01/ and a declaration from an engineer/ED/ which was consulted by Organoeste Franchising at the time of initial project consideration. Both evidences above affirms that the CDM incoming was always considered as essential for the project implementation, that participates on Organoeste Board and interests initails investors reunions during the intire year of 2004 and where consulted by Organoeste Board w.r.t the project sustainability and carbon credits revenues. Therefore, the validation team concludes that previous CDM consideration was seriouly and continuos considered by the PP.

The additionality was answered properly. Hence, generally Attachment A to Appendix B of the simplified modalities and procedures for small-scale CDM project activities has to be applied in order to justify the project's additionality. Despite of that please refer to raised CL B3 on section 4 of this report.

Application of methodology / methodological tools

The methodology applicable to the project activity is AMS-III.F, version 8, valid from 2009-07-31 onwards and does not allow for different methodological choices.

Barrier analysis

According to interviewed and the PDD, the main consumers are small farmers, which works in a very simple and small companies. Therefore, it is not possible to work with long term contracts. This affects the sales securities and the profitability of the company. The main barriers described for the proposed project are:

Financing Barrier:

- Difficulty of obtain financing because of guarantees required by bank.
- Difficulty to sell the product.
- Difficulty to negotiation with rural people because they don't do long terms contracts.

Technological Barrier:

- Lack of management and/or operational know-how to conduct the activities.
- Is common to the composting units to produce compost with unacceptable level of coliforms (bacteria that indicates pollution) and toxic metals.
- Lack of specialized workers for this kind of activity.
- Technology used in this project activity had not been implemented before by the project developer.

Despite of the barriers shown, please refer to rose CL B1 and B2. For details of the assessment regarding the evaluation of the barriers pl. refer to table A-4.

5.2.6 Monitoring Methodology

Several of the monitored parameters predicted in the methodology and applicable tools were not correctly applied on the first version of the PDD. Please refer to CAR B6 on section 4 of this report for detailed assessment. After the closure of the rose CAR all monitored parameters are in accordance with the applicable methodology and its foreseen tools.

5.2.7 Monitoring Plan

The project applies the monitoring methodology AMS III.F.: Avoidance of methane emissions through controlled biological treatment of biomass: (Version 8) for small scale CDM project activities.

The monitoring of all baseline parameters is sufficiently addressed on PDD. Monitoring of project emission is designed in line with applicable methodology and leakage emission is not necessary.

The procedure for calibration, accuracy and maintenance of monitoring equipment will be taken under manufacture's recommendation and the responsibilities are clearly mentioned in section B.7.1 of the PDD.

Project directly involved personal are constant trained and detailed procedures for monitoring the proper activity of the plant, and therefore the aerobic condition of the composting process, is established as it could be evidenced during site visiting.

The soil application of the compost is also monitored during the project activity to assure that further anaerobic decay of the final compost does not occur. Additionally, the run-of-water is monitored and if applicable will be accounted on ER calculation.

Despite of that, please refer to rose CAR B7.

5.2.8 Project Management Planning

All monitored data will be achieved electronically during the entire crediting period plus two years after the end of the project activity, or the last CERs issuance date, whichever is the latest. The data will be collected by Organoeste Franchising Ltda and EcoSecurities Limited will assure the quality of the monitoring parameters and its relevant data.

5.2.9 Crediting Period

The starting date of the crediting period is 2010/07/01. Despite of that more detailed information was requested for a proper assessment. Please refer to rose CAR C1 on section 4 of this report. Moreover, the operational lifetime mentioned in PDD is 21 years. Despite of that please refer to rose CL C1 on section 4 of this report.

5.2.10 Environmental Impacts

The host government does not request for an EIA. To be in line with Brazilian Laws and requirements an Environmental Study was performed at the time of the Environmental Licenses issuance. According To Brazilian legislation an Environmental Study is necessary at the time of Environmental License issuance, which is the initial step for the implementation of an Enterprise in the host country. At that moment, an Environmental Study must be taken to assure that the company operation is environmentally safe and sound. Considering that the Brazilian local Environmental bodies have issued the Environmental license for both plants predicted to operate in the proposed project activity, the validation team assumes that the Environmental Study was appropriately assessed. During on-site visit it were shown to validation team the environmental documentation requested by local environmental agencies/EPOD//PEAMOD/. Additionally, no transboundary impacts could be identified for the proposed project activity.

5.2.11 Comments by Local Stakeholders

The Stakeholder consultation process was properly evidenced. All invitation letter and receipt of confirmation of the list of Stakeholder given on section E.1 of PDD was correctly assessed. No comments were received for the proposed project. Please refer to CAR E1 on section 4 of this report.

6 VALIDATION OPINION

Ecosecurities do Brasil, which is member of EcoSecurities International Limited and are responsible for negotioations on the host country (Brazil), has commissioned the TÜV NORD JI/CDM Certification Program (CP) to validate the project: "Organoeste Dourados & Andradina Composting Project" with regard to the relevant requirements of the UNFCCC for CDM project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria include article 12 of the Kyoto Protocol, the modalities and procedures for CDM (Marrakech Accords), the simplified modalities and procedures for small scale CDM project activities of annex II to decision 21/CP.8 and the relevant decisions by COP/MOP and CDM Executive Board.

The project activity produces organic fertilizer through aerobically composting process utilizing mainly agro industrial residues. The project intends to reduce GHG emissions by avoiding anaerobic decay, and therefore methane emission, of the residual waste applied in the project activity, which in the pre project scenario would be disposed in a landfill solid waste disposal.

A risk based approach has been followed to perform this validation. In the course of the pre-validation, 09 Corrective Action Requests (CARs) and 12 Clarification Requests (CRs) were raised and successfully closed.

The review of the project design documentation and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and review of comments by parties, stakeholders and NGOs have provided TÜV NORD JI/CDM CP with sufficient evidence to validate the fulfilment of the stated criteria.

In detail the conclusions can be summarised as follows:

- The project is in line with all relevant host country criteria (Brazil) and all relevant UNFCCC requirements for CDM.
- The project additionality is sufficiently justified in the PDD.
- The monitoring plan is transparent and adequate.
- The calculation of the project emission reductions is carried out in a transparent and conservative manner, so that the calculated emission reductions of 217,269 tCO_2e are most likely to be achieved within the 7 years (renewable) crediting period (1st Jul 2010 - 31th Jun 2017).

The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the validation.

Essen, 2009-10-20

Rainer Winter

TÜV NORD JI/CDM Certification Program

Validation Team Leader

Essen, 2009-10-20

Eric Krupp

TÜV NORD JI/CDM Certification Program

Senior Assessor

7 REFERENCES

Table 7-1: Documents provided by the project participant

Reference	Document
/CCOA/	Calibration certificated of Organoeste Andradina. Issued from Altec Balanças (private company), dated 2008-07-24, invoice number 133. Scale description: brand: Líder Lap, 60,000 kg. Model 1D 1001 PN of number 1474.
/CCOD/	Calibration certificated of Organoeste Dourados. Issued from Inmetro (National Institute of metrology, Standardization and Industrial Quality from Brazil), dated 2008-09-03, and approval number 1750794-9. Scale description: brand: Alpha, Model 3101e. Inmetro number 4750794-9, serial number 2348 and verification plate 1274042.
/ECOA/	EcoCert Certificated at Organoeste Andradina. Product in conformity with the normative instruction number 07/99, REG. CEE2092/91 (annex II), rules NOP (sub-part G), rules jas (tab. 1 and 2). For inputs of the organic agricultural for trade in the Brazilian internal market. ECOCERT Brasil. Organoeste ind. Com. Composto Orgânico Ltda-ME. Year of manufacture 2007/2008. Operator code 2057BR, products: Organosuper (organic fertilizer) estimated quantity 120,000 tons, number attested 2057BR0600N1p(BR), valid until 2008-05-15.
/ECOD/	EcoCert Certificated at Organoeste Dourados. Product in conformity with the law number 10831/03, REG. CEE2092/91 (annex II), rules NOP (sub-part G), rules jas (tab. 1 and 2). For inputs of the organic agricultural for trade in the Brazilian internal market. ECOCERT Brasil. Organoeste ind. Com. Composto Orgânico Ltda-ME. Year of manufacture 2008/2009. Operator code 2056BR, products: Organosuper (organic fertilizer) estimated quantity 120,000 tons, number attested 2056BR0800N1p(BR), valid until 2009-10-27, dated 2008-11-03.
/ED/	Engineer Marcos Duarte (CREA No. 1990/D-MS) declaration dated 2009/07/01.
/EFTC/	Evidence on the first traceable contact between Organoeste Franchising Ltda and Ecosecurities Limited. Email exchange dated 2006/08/14.
/EPOD/	Environment Project of Organoeste Dourados. Dated August 2007. Describe the project, the process and monitoring system. Issued by Organosuper.
/ILOA/	Installation License of the Organoeste Andradina, issued by Company of Technology of Environmental Sanitation of state of São Paulo, number 13001546. Process number 13/00103/05, dated 2007-11-08. Description of the facility: production of organic-inorganic. Quantity of employees: 4. Average production: 2130 tons/month of organic fertilizer. Equipments: 1 coffer-dam, 1 rotating sieve, 1 scale, 5 carrier belts,1 wheel loader, 2 treadmills.

<table>
<tr><th>Reference</th><th>Document</th></tr>
<tr><td>/LSH/</td><td>Letters of Stakeholder consultation</td></tr>
<tr><td>/MLOA/</td><td>Municipally Licence Organoeste Andradina, issued by municipality of Andradina, number 2147, municipal inscription 3541, state inscription 170.100.895.111, valid until 2008-12-31.</td></tr>
<tr><td>/MLOD/</td><td>Municipally Licence Organoeste Dourados, issued by municipality of Dourados, number 33666, municipal inscription 1001123848, dated 2008-02-01, valid until 2008-12-31.</td></tr>
<tr><td>/MPOD/</td><td>Monthly Production of the Organoeste Dourados:
<table>
<tr><th>Month/2008</th><th>Quantity (kg)</th></tr>
<tr><td>January</td><td>629,527</td></tr>
<tr><td>February</td><td>416,711</td></tr>
<tr><td>March</td><td>485,150</td></tr>
<tr><td>April</td><td>881,900</td></tr>
<tr><td>May</td><td>594,020</td></tr>
<tr><td>June</td><td>509,230</td></tr>
<tr><td>July</td><td>626,040</td></tr>
<tr><td>August</td><td>713,705</td></tr>
<tr><td>September</td><td>705,350</td></tr>
<tr><td>October</td><td>545,953</td></tr>
</table></td></tr>
<tr><td>/MWROA/</td><td>Main waste received by Organoeste Andradina. Organoeste Andradina receive mainly the following wastes: slime class II from treatment station for sewage; parts of the bovine stomach, ash; scraping of the scalp and bovine hair; dry slime and activated sludge; residues of flour and sugar, and slime from washing of the plant that produces wafers.</td></tr>
<tr><td>/MWROD/</td><td>Main waste received by Organoeste Dourados. Organoeste Dourados receive mainly the following wastes: ash and waste from industrial dining; incubatory (eggs that are discarded), flour feather and waste aviary; sludge, fat and blood (industrial waste sludge from killing of pigs and the industrialization of meat); meat and bone flour; waste of ration; sawdust; draff of the refining of lubricating oil neutralized; solid waste, class II, fuller land (clay with high absorption capacity); waste of pigsty; pie of filter of hydraulic press, solid waste not industries; oil draff; residues from: offices, dirt from sweeper, cardboard. All suppliers make analyses in lab for all products delivery.</td></tr>
<tr><td>/OLOA/</td><td>Operation License Organoeste Andradina, issued by Company of Technology of Environmental Sanitation of state of São Paulo, number 13001484, valid until 2010-02-13, process number 13/001103/05, dated 2008-02-13. Activity: industry and commerce of organic compound Organoeste Ltda. Quantity of the operators: 4. Production 2130 tons. Equipments: 1 coffer-dam, 1 rotating sieve, 1 scale, 5 carrier belts, 1 wheel loader, 2 treadmills.</td></tr>
</table>

Reference	Document
/OLOD/	Operation License Organoeste Dourados, issued by IMASUL (Institute of Environment of the state of Mato Grosso do Sul), number 133/2006, process number 23/100659/2006, dated 2006-04-11, valid for 4 years. Activities: Receiving of the industrial organic waste class II (not inert) and manufacturing of fertilizers. Capacity 60 tons/day. Compulsory: monitoring of soil where will be stored the waste; tree curtain (of the species: *Myrtus communis tarentina* and *Eucalyphtus globulus*) around the company. System of environmental control. Minimum distance from waters 200 m.
/PA/	Purchase Agreement signed by and between Organoeste Franchising Ltda and Ecosucurities Limited dated 2007/08/22.
/PAOA/	Product analyses of Organoeste Andradina. Issued by laborsolo. Date of entrance: 2007-08-24. Date of leaving: 2007-09-03. Lab code 40017/183932. It was analysed only the composition of organic matter. Total carbon 7.06%; organic carbon 4.51%; calculated chemical oxygen demand 12.02%, total mineral waste 63.69%; total nitrogen 0.6%.
/PDD/	Project Design Document named "Organoeste Dourados & Andradina Composting Project", version 3 dated 2009-08-25, hosted (version 1) from 2008-11-07 to 2008-12-06.
/PEAMOD/	Plan of Environment Auto-Monitoring of the Organoeste Dourados. Dated August 2005. Describe the project, the process and the monitoring system.
/PROD/	Patent Request of the Organoeste Dourados. Title of invention: Organic fertilizers mix/composed HSNI for agricultural, request number: PI0503277-6 (this patent is available in website: http://pesquisa.inpi.gov.br/MarcaPatente/servlet/PatenteServletController?Action=detail&CodPedido=671094&PesquisaPorTitulo=&PesquisaPorResumo=&PesquisaPorDepositante=&PesquisaPorInventor=&PesquisaPorProcurador=). Dated 2005-01-28.
/QRMOD/	Quantities received of solid waste per month of the Organoeste Dourados.

Month/2008	Quantity (kg)
January	911,710
February	494,900
March	856,850
April	561,350
May	967,600
June	393,460
July	1,282,740
August	1,081,900
September	1,455,540
October	788,230

Reference	Document
/RCOD/	Regularity certificate of the Organoeste Dourados, issued by IBAMA (Brazilian Institute of environment and natural resources) federal technical register, number 1758508, dated 2008-10-02, valid until 2009-01-02. This certificate shows the regularity in the register of potentially polluting activities. Utility services: treatment and destination of the industrial waste. Authentication: yiq2.m1p6.a41u.2jj4.
/RM/	Organoeste Board Register Meeting dated 2004/02/14 for early consideration of CDM.
/RPOD/	Register of the product or the Organoeste Dourados. In Agricultural, Livestock and Supplier Department. Number MS-52611 10000-5, product: organic fertilizer composting, class A, granted in 2007-04-18. Process number 21026001940200600. Raw material components: bone flour, dregs, organic residue from agricultural industry class A, sharps and pies from vegetables and ashes. Physical nature: solid. Dated 2007-04-18.
/SPnGCIROD/	Statement that the product is not resulting of the genetic changes and neither was submitted to ionizing radiation. Issued by University of São Paulo, Biomedical Science Institute, microbacteria lab. Dated 2005-09-08.
/XLS/	Emission reduction calculation spreadsheet dated 2009/08/25.
/WMOD/	Water monitoring of the Organoeste Dourados. Carry out by *Solanalise, central de análises Ltda*. Dated 2008-06-10. Were analysed: acidity, chemical oxygen demand, biological oxygen demand, ammoniacal nitrogen, dissolved oxygen, pH. It was made according to *Conama* (National Council of Environment) resolution number 20/86, with parameters to human consumption. Dated 2008-05-23. Was made the analysis bacteriological of the water. Were analysed: presence of coliforms (total and fecal) and counting of coliforms (total and fecal).

Table 7-2: Background investigation and assessment documents

Reference	Document
/AMS-III.F/	Avoidance of methane emission through controlled biological treatment of biomass, version 6.
/CGD/	Compendium of Guidance on the Debundling for SSC project activities – EB 36, annex 27

Reference	Document
/CPM/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)
/GCP/	UNFCCC: Guidelines for completing CDM-PDD and CDM-NM
/GCSSC/	Guidelines for completing the form for submission of bundled Small-scale CDM project activities (F-CDM=SSC-Bundle) (Version 1)
/IPCC-GP/	IPCC Good Practice Guidance & Uncertainty Management in National Greenhouse Gas Inventories, 2000
/IPPC-RM/	Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual
/KP/	Kyoto Protocol (1997)
/MA/	Decision 3/CMP. 1 (Marrakesh – Accords & Annex to decision (17/CP.7))
/TA/	Tool for the demonstration and assessment of additionality (Version 05.2).
/TMEA/	Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site (Version 4).
/TEF/	Tool to calculate the emission factor for an electricity system (Version 01.01)
/VVM/	Validation and Verification Manual (Version 1, Annex 3; EB 44)

Table 7-3: Websites used

Reference	Link	Organisation
/dna/	http://www.mct.gov.br	Science and Technology Department (DNA of Brazil)
/inpi/	www.inpi.gov.br	National Institute of Industrial Property (from Portuguese Instituto Nacional de Propriedade Industrial)
/ipcc/	http://www.ipcc.ch/ipccreports/index.htm	IPCC publications
/unfccc/	http://cdm.unfccc.int	UNFCCC

Table 7-4: List of interviewed persons

Reference	MoI[1]		Name	Organisation / Function
/IM01/	V	☒ Mr. ☐ Ms.	Jose Justinho Feitosa	Industrial manager – Organoeste Andradina
/IM01/	V	☒ Mr. ☐ Ms.	Ítalo Massabone	Technical responsible – Organoeste Andradina
/IM01/	V	☐ Mr. ☒ Ms.	Katherine Chirata Tosta	Agronomist Engineer – Organoeste Dourados
/IM01/	V	☒ Mr. ☐ Ms.	Thiago A. P. Viana	Project manager – EcoSecurities
/IM01/	T	☒ Mr. ☐ Ms.	Jorge Dausaquer	Dourados ex Politician

[1)] Means of Interview: (**T**elephone, **E**-Mail, **V**isit)

ANNEX

A1: Validation Protocol

A2: Assessment of Baseline Identification

A3: Assessment of Financial Parameters

A4: Assessment of Barrier analysis

A5: Outcome of the GSCP

A6: Appointment certificates of the team members

ANNEX 1: VALIDATION PROTOCOL

Table A-1: Requirements Checklist

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
A. General Description of Project Activity				
A.1. Approval *The written approval of the parties involved is a mandatory requirement*				
A.1.1. Has the project provided written approvals of all parties involved? *Indicate whether a letter of approval has been received, with a clear reference to the supporting documentation.* *Indicate whether this letter was provided to the DOE by the project participants or directly by the DNA*	In accordance with the CDM M&P at the stage of validation a Party involved may or may not have provided its approval at the time of making the PDD public. The approval of the parties involved is required at the time of requesting registration. At the time of the completion of this draft-report the LoA is pending for both parties involved, Brazil (host country) and United Kingdom of Great Britain and Northern Ireland (Annexure I country). For the Brazilian DNA a positive validation opinion is a prerequisite for the host government approval and thus the LoA cannot be considered at the present validation stage. The request for registration will not be submitted before it has been issued by the DNA	/PDD/ /dna/ /R1/ /R7/	(OK)	
A.1.2. Are the approvals issued from orgainsations	Please refer to topic A.1.1	/PDD/	(OK)	

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
listed as DNAs on the UNFCCC CDM website? *Indicate the means of validation employed to assess the authenticity*		/dna/ /R1/ /R7/		
A.1.3. Do the written approvals confirm that the corresponding party is a Party to the Kyoto Protocol?	Please refer to topic A.1.1	/PDD/ /dna/ /R1/ /R7/	(OK)	
A.1.4. Do the written approvals confirm that the participation is voluntary?	Please refer to topic A.1.1	/PDD/ /dna/ /R1/ /R7/	(OK)	
A.1.5. Does the written approval from the host country confirm that the project contributes to the sustainable development in the country?	Please refer to topic A.1.1	/PDD/ /dna/ /R1/ /R7/	(OK)	
A.1.6. Do the written approvals refer to the precise project title in the PDD submitted for registration?	Please refer to topic A.1.1	/PDD/ /dna/ /R1/ /R7/	(OK)	
A.1.7. Are the written approvals unconditional with regard to A.1.3 to A.1.6?	Please refer to topic A.1.1	/PDD/ /dna/ /R1/ /R7/	(OK)	

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
A.1.8. Is the information regarding the project participants listed in section A3 and in Annex 1 of the PDD internally consistent to each other?	The parties involved in the project activity are Brazil (Host Party) and United Kingdom of Great Britain and Northern Ireland. The project participants are: 3. Organoeste Franchising Ltda. (Brazil) 4. EcoSecurities Group Plc (United Kingdom of Great Britain and Northern Ireland) All information provided in section A.3 and Annex 1 are consistent.	/PDD/ (A.3.), (Annex 1)	OK	
A.1.9. Are all project participants listed in the PDD approved at least by one Party involved? *Indicate whether the participation of the project participant(s) has been approved by a Party to the Kyoto Protocol.* *Describe the means of validation employed to draw this conclusion.*	Brazil, the host country, has ratified the Kyoto Protocol on 23rd August 2002. The Brazilian DNA assigned for CDM is the "Global Climate Change international Commission". United Kingdom of Great Britain and Northern Ireland have ratified the Kyoto Protocol on 31th May 2002 and is listed as an Annexure I Party. The United Kingdom of Great Britain and Northern Ireland DNA assigned fro CDM is the "Global Carbon Markets".	/unfccc/ /dna/ CDM Modalities and Procedures §31b	OK	
A.1.10. Are any other project participants approved but not listed in the PDD?	There is no other project participant.	/IM01/	OK	

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
A.2. Contribution to Sustainable Development *The project's contribution to sustainable development is assessed.*				
A.2.1. Has the host country confirmed that the project assists it in achieving sustainable development? *Contain a statement confirming whether the letter of approval by the DNA of the host party confirmed the contribution of the project to the sustainable development of the Host Party.*	The Brazilian DNA has not yet issued the LOA, in which the contribution to sustainable development is addressed and confirmed. According to DNA's rules, a positive validation opinion is a pre-requisite to issue a LoA. Please refer to topic A.1.1	/PDD/ (A.2) /dna/	(OK)	
A.2.2. Will the project create other environmental or social benefits than GHG emission reductions? *Describe the other positive aspects not related to GHG emission reduction on the environment*	The view of the project participants on the contribution of the project activity towards sustainable development is briefly described in section A.2. of the PDD. The project contribution for sustainable development could be positively assessed as: - it reduces the GHG emission caused by decomposition of solid waste; - it contributes to the appropriate disposal of the waste; - it increases the re-use of the land in the landfill; - in contributes to diminish the pollution of air and water; - as it is an organic product is less harmful to the environment; - it increases the offer of jobs and income generation.	/PDD/ (A.2.) /IM01/	OK	

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
A.3. PDD editorial aspects *The PDD used as a basis for validation shall be prepared in accordance with the latest template and guidance from the CDM Executive Board available on the UNFCCC CDM website.*				
A.3.1. Has the latest version of the PDD form been applied?	Yes, the CDM PDD form version 3 was applied.	/PDD/ /unfccc/	OK	
A.3.2. Has the PDD been duly filled in accordance with the latest guidance(s)?	The PDD has in general been filled in accordance with the PDD guidelines. Nevertheless CARs and CRs are issued in order to improve the PDD: please refer to rose CLs A1, A2, A3, A4, A5, B1, B2, B4, B5 and CARs B1, B2 and B7 on section 4 of this report.	/PDD/ (B.5) (B.6.1) (B.6.2) (B.6.3) (B.7.1) (B.7.2) (D.1) (D.2) (E.1) (E.2)	~~CLs A1, A2, A3, A4, A5, B1, B2, B4, B5 and CARs B1, B2 and B7~~	OK

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
A.4. Technology to be employed *Validation of project technology focuses on the project engineering, choice of technology and competence/ maintenance needs. The DOE should ensure that environmentally safe and sound technology and know-how is used.*				
A.4.1. Does the PDD contain a clear, accurate and complete project description? *The PDD shall contain a clear description of the project activity which provides the reader with a clear understanding of the precise nature of the project activity and the technical aspects of its implementation.* *Pl. consider esp.* chapters *A.2, A.4.2 and A.4.3 (in case of LSC PDD) for assessment.* *Describe the process undertaken to validate the accuracy and completeness of the project description.* *Contain the DOE's opinion on the accuracy and completeness of the project description.*	The project description is given in several parts of the PDD (esp. in sections A.2 and A.4.2). The project activity consists on the production of organic fertilizer through aerobically composting process using mainly solid waste coming from agro industrial activities residues. Additionally, small portions of municipality residual waste can be applied in the project scenario. The proposed project prevents the methane emissions that would in the absence of the project activity been generated by anaerobic decay of the residual waste that is being utilized by the composting process. The composting process followed in the plant is based on the application of a Biotechnological Catalyst Extract HSNI (mix of various microorganisms and patented under the Brazilian National Institute of Industrial Property with ID No. PI-0504277-1 A) and water to the residual waste. The received residual waste is immediately piled and mixed with the composting extract. To guarantee a minimum 10% content of Oxygem the pile will have limited height and be continuously turnover slowly. The aerobically biodegradation (composting process) of the waste during 15 to 21 days results in an organic fertilizer. Despite of that, please refer to rose CL A3,	/PDD/ (A.2) (A.4.2) /IM01/	~~CLs A3, B4 and B5 and CAR B2~~	OK

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	B4, B5 and CAR B2 on section 4 od this report.			
A.4.2. Is this description in accordance with the real situation or (in case of greenfield projects) is it most likely that the project will be implemented acc to the project description	The project description is in accordance to what it could be evidenced during on-site visit and the project implementation is in line with its description on PDD.	/PDD/ (A.4.3) /IM01/	OK	
A.4.3. In case the project involves alteration of the existing installation or process, is a clear description available regarding the differences between the project and the pre-project situation? *Describe the steps taken to validate this issue.*	The project is a new facility. The process of composting was development during the planning stage and execution of the project.	/PDD/ (A.4.3) /IM01/	OK	
A.4.4. Does the project design engineering reflect current good practices? *Consider the equipment specifications, literature (e.g. EU BREF papers) and professional experiences. Describe the process undertaken to assess the engineering.*	The technology used to do the composting reflects good practices. The Biological Catalyst Extract HSNI, has patent registered in INPI (National Institute of Industrial Property from Portuguese Instituto Nacional de Propriedade Industrial) under number PI0504277-1 A. It was checked in INPI website and the product register ID could be properly assessed. The good practices this project design is the use of the solid organic waste to produce organic fertilizer, decreasing the quantity of residues in landfills.	/PDD/ (A.4.3) /IM01/ /inpi/ /PROD/	OK	

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
A.4.5. 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? *Describe the process undertaken to assess the state of the art technology.*	The technology used in the project activity is advanced in state of the art technology for the utilisation of composting of solid residues. All components are of Brazilian origin, thus a technology transfer doesn't happen.	/PDD/ (A.4.2., A.4.3) /IM01/	OK	
A.4.6. Does the project make provisions for meeting training and maintenance needs? *Describe the process undertaken to assess the maintenance and training needs.*	During the visit it was related to validation team that the Organoeste Andradina was the first unit of the franchising. All the system of the operation was development in this site. After a period of test, the knowledge was transmitted to Organoeste Dourados. The operation depends on the material waste receiving, the waste composition, the pile height and the turn over. The wheel loader operator has a licence to drive this machine and the other employees received suit training. As the composting process is repetitive over the time, the training regarding the operation is made when there is a new waste received and when there is a new staff admission. Organoeste Dourados has a maintenance procedure to the wheel loader that was provided by the manufacturer (Caterpillar, SBPU6290, dated February 1990) and the technical report issued by Ipiranga, named Ipiranga CT/ver.03, dated 2002-03-15. The maintenance process of the Organoeste Andradina, consists in to grease bearings	/PDD/ (B.7.2) /IM01/	OK	

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	and alignment of belts. For this issue, there is no procedure documented.			
A.5. Small scale project activity *It is assessed whether the project qualifies as small-scale CDM project activity*				
A.5.1. Does the project qualify as a small scale CDM project activity as defined in decision 4 / CMP.1 annex II? *Describe the steps taken to validate this issue.*	The project was qualified as small scale because its emissions reductions annual are smaller than 60 $ktCO_2$, according to defined methodology AMS-III.F.	/PDD/ (B.1) /AMS-III.F/	OK	
A.5.2. Does the project apply one of the approved small scale categories and any methodology and tool referred therein? *Describe the steps taken to validate this issue. Check, if applicable the expiry dates of the applied methodology.*	The project activity applies the small scale methodology AMS-III.F and all predicted tools (Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site", Version 4). For calculations of Grid Emission Factor, **Error! Reference source not found.** the project refers to AMS-I.D. (Grid connected renewable electricity generation), Version 14, Valid from 31 Jul 09 onwards. For its part, AMS-I.D. refers to the "Tool to calculate the emission factor for an electricity system", Version 1.1.	/PDD/ (B.1) /AMS-III.F/	OK	
A.5.3. Is the small scale project activity not a debundled component of a larger project activity? *Describe the steps taken to validate this issue. Pl refer to the Compendium of guidance on debundling (EB 36, Annex 27).*	The activity project is not a de-bundling. Although both companies have similar proposed project activities, any de-bundling could be observed as the project sites are different and the distance between them is greater than 1 km.	/PDD/ (A.4.5) /AMS-III.F/	OK	

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
		/CGD/		
B. Project Baseline, Additionality and Monitoring Plan				
B.1. Application of the Methodology				
B.1.1. Does the project apply an approved and applicable CDM methodology and a valid version thereof? *Describe the steps taken to validate this issue.*	Yes, the methodology applicable to the project activity is AMS-III.F, version 8, valid from 2009-07-31 onwards.	/PDD/ (B.1) /unfccc/	OK	
B.1.2. Is the applied CDM methodology identical with the version available on the UNFCCC website? *Describe the steps taken to validate this issue.*	The methodology applied by the PPs is identical with the version available on UNFCCC website. This has been checked during validation.	/PDD/ (B.1) /unfccc/	OK	
B.1.3. Are all applicability criteria in the methodology, the applied tools or any other methodology component referred to therein fulfilled? *Describe for <u>each</u> applicability criterion listed in the selected approved methodology the steps taken to assess the information contained in the PDD.*	Following the criteria of methodology AMS-III.F (please, refer to methodological paragraphs): 8 the project activity avoid emission of methane to the atmosphere once that use the solid waste that would have otherwise been left to decay anaerobically in a disposal site. And there is a biological control treatment through aerobic composting and proper soil application; 9 the project will not recover or combust landfill gas and	/PDD/ (A.4.3) (B.2) AMS-III.F/ /TMEA/	~~CAR B1~~ ~~CAR B2~~ ~~CL B4~~	OK

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	undertake controlled combustion of the waste; 10 the emission reduction is smaller than 60 kt CO2e; 11 this project activity is applicable because it makes a treatment in the waste from municipal solid residues and agro industrial activities; 12 it is a new facility. Therefore, is not necessary to demonstrate this criterion; 13 it is uses a solid waste how raw material, but it is not a co-treatment. Thus, this criterion can be disregard; 14 the location and characteristics of the disposal site of the biomass in the baseline are known. For the criterions predicted on paragraphs 8, 9, 10, 11, 12, 13, 15 and 15 of the applicable methodology please refer to rose CAR B1, B2 and CL B4.			
B.1.4. Is the project in accordance to every other stipulation or requirement mentioned in all sections of the methodology? *Describe the steps taken to check whether the proposed project activity meets all the other possible stipulations and /or limitations mentioned in all sections of the approved methodology selected.*	Please refer to topic B.1.3 above.	/PDD/ (A.4.3) (B.2) AMS-III.F/ /TMEA/	~~CAR B1~~ ~~CAR B2~~ ~~CL B4~~	OK

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
B.2. Project Boundaries *Project Boundaries are the limits and borders defining the GHG emission reduction project*				
B.2.1. Are the project's spatial boundaries (geographical) clearly defined? *Provide information on how the validation of the geographical boundary has been performed either based on reviewed documented evidence or by describing what was observed/viewed during a site visit.*	The project boundary is clearly defined as Dourados and Andradina landfills, the composting units, the clients that buy the compost and the itineraries between these places. The Organoeste Andradina address is Estrada Municipal do Jaó, km 05 + 300 m, s/n, Estância Nossa Senhora Aparecidam Bairro Zona Rural, in the municipality of Andradina, State of São Paulo, Brazil. And Organoeste Dourados address is Avenida Quatro, s/n, Lotes E/F, Quadra 12, Caixa Postal 1001, CEP 79830-970, in the municipality of Dourados, State of MAto Grosso do Sul, Brazil. Despite of that please refer to rose CL A2 on section 4 regarding the geographical coordinates of the plants.	/PDD/ (B.3) /AMS-III.F/ /dna/	~~CL A2~~	OK
B.2.2. Are all sources and GHGs included in the project boundary as required in the applied methodology? *Provide information on how the validation of the GHGs and sources has been performed either based on reviewed documented evidence or by describing what was observed/viewed during a site visit.*	In section B.3 of the PDD the sources in the project boundary are given. Generally these sources are in compliance with the applied Methodology as well as with the real situation. This could be validated by reviewing the PDD and AMS-III.F and during the visit of the site.	/PDD/ (B.3) /AMS-III.F/	OK	
B.2.3. In case the methodology allows to choose whether a source and/or gas is to be included, is the choice sufficiently explained and justified?	Please refer to B 2.3. The choices already provided are duly justified in section B.3 of PDD.	/PDD/ (B.3) /AMS-	OK	

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
Confirm if the justification provided by the PPs is reasonable, based on assessment of supporting documented evidence provided by the PPs or by onsite observations.		III.F/		
B.3. Baseline Identification *The choice of the baseline scenario will be validated with focus on whether the baseline is a likely scenario, and whether the methodology to define the baseline scenario has been followed in a complete and transparent manner.*				
B.3.1. What possible baseline scenarios have been considered? *Fill in all alternatives in table A-2.*	Four baseline scenarios have been considered: • Uses the solid waste to produce organic fertilizer without the CDM. • Disposal of the solid waste in a landfill (Andradina and Dourados municipal landfills), continuation of common practices. • Disposal of the solid waste in a landfill that the captured gas is flared, without generation electricity or heat. • Disposal of the solid waste in a landfill where the gas is captured and flared to generation of electricity. In the course of document review it could be validated that no other alternatives for this project activity.	/PDD/ (B.4) /AMS-III.F/	OK	

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
B.3.2. Is the list of alternatives complete? *Describe how it was validated that all alternatives are plausible and no plausible alternative is excluded from the consideration*	☒ All plausible alternative scenarios listed in the approved methodology have been considered. In the course of document review and site visit, it has been validated that no other alternatives which supply comparable outputs and / or services are to be taken into consideration. Thus no plausible scenario has been omitted. ☐ The following alternative scenarios/options have been omitted. Corresponding CAR(s)/CL(s) has /have been issued: Please refer to table A-2 for proper assessment.	/PDD/ (B.4) /AMS-III.F/	OK	
B.3.3. What has been identified as the baseline scenario? *Describe the chosen BL scenario*	The first scenario was identified: uses of the solid waste to produce organic fertilizer through composting process without the CDM project implementation. Please refer to table A-2 for proper assessment.	/PDD/ (B.4) /AMS-III.F/	OK	
B.3.4. Has the baseline scenario been determined according to the methodology? *Describe how it is validated that the identification of the most plausible baseline scenario is carried out in accordance with the applied methodology and applied methodological tools. Please refer to table A-2.*	For details of the assessment regarding the evaluation of the baseline scenario pl. refer to table A-2. ☒ The determination has been carried out as per the applied methodology. ☐ The following CARs / CLs have been identified with respect to the selection of the baseline scenario:	/PDD/ (B.4) /AMS-III.F/	OK	
B.3.5. Has any plausible alternative scenario been excluded? *Describe how it is validated that no plausible alternative scenario has been excluded.*	For details of the assessment regarding the evaluation of the baseline scenario pl. refer to table A-2. ☒ No plausible baseline scenario has been excluded. ☐ The following plausible baseline scenarios have been excluded though no adequate justification has been provided for elimination. The following CARs / CLs have	/PDD/ (B.4) /AMS-III.F/	OK	

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
	been issued:			
B.3.6. Has the baseline scenario been determined using conservative assumptions where possible? *Describe whether the choice of the identified baseline scenario is reasonable by validating the key assumptions, calculations and rationales used in the PDD. Describe whether these are conservatively interpreted in the PDD.*	For details of the assessment regarding the evaluation of the baseline scenario pl. refer to table A-2. ☒ The baseline scenario has been determined using conservative assumptions where possible. Please refer to comments in table A-2 and sections B.3.2 to B.3.5 above. ☐ The following CARs / CLs have been issued because assumptions used in the baseline determination have been assessed to be not conservative:	/PDD/ (B.4) /AMS-III.F/	OK	
B.3.7. Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations? *Describe whether the PP has shown that all relevant policies and circumstances have been identified and correctly considered in the PDD in accordance with the guidance by the Board. Pl. consider the guidance EB 22 annex 3 (regarding E+ and E- policies).*	The PP is according to relevant national and sectoral policies. For details of the assessment regarding the evaluation of the baseline scenario pl. refer to table A-2.	/PDD/ (B.4) /AMS-III.F/	OK	
B.3.8. Is the baseline scenario determination compatible with the available data and are all literature and sources clearly referenced? *Describe whether the documents and sources referred to in the PDD are correctly quoted and clearly referenced.*	The so far available data are in accordance with the BL identification and the reference used in PDD could be evidenced. However, please refer to rose CL B1 and B2 on section 4 of this report.	/PDD/ (B.4) /AMS-III.F/	~~CL B1~~ ~~CL B2~~	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
B.4. Additionality Determination *The assessment of additionality will be validated with focus on whether the project itself is not a likely baseline scenario.*				
B.4.1. Methodology				
B.4.1.1. Did the additionality justification follow the requirements of the applied methodology and/or methodological tools? *Describe how it is validated that additionality justification is carried out in accordance with the applied methodology and/or applied methodological tools.*	The additionality was answered properly. Hence, generally Attachment A to Appendix B of the simplified modalities and procedures for small-scale CDM project activities has to be applied in order to justify the project's additionality. Despite of that please refer to rose CL B6 on section 4 of this report.	/PDD/ (B.3) (B.5) /AMS-III.F/	~~CL B6~~	OK
B.4.2. Consideration of CDM before project start				
B.4.2.1. Is the project starting date reported in accordance with the CDM glossary of terms? *Describe the steps taken to validate this issue.*	The project starting date (2006/04/11) was defined as the Operational License issuance, thus it is in accordance with the CDM Glossary of terms.	/PDD/ (B.5) (C.1.1)	~~CL B3~~	OK
B.4.2.2. In case the project start date is before commencing of validation, was the incentive from the CDM seriously considered and are details given in the PDD? *Describe whether the evidence to support such consideration is adequately and transparently described in*	As the project starting date is before the PDD publication for Global Stakeholder consultation, the PP shall demonstrate that the CDM was seriously and continuous considered prior to the project implementation. As a result of this request, a Register Meeting document dated 2004/02/14 could be properly assessed by the	/PDD/ (B.5) (C.1.1) /ED/ /RM/	~~CL B3~~	OK

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
the PDD.	validation team. It was evidenced the PP's intention to proceed with the CDM implementation at the project site, Moreover, the CDM incentive was seriously considered before the project stating date and evaluated as essential for the project implementation by Organoeste Franchising Board/RM/.Considering EB 49 Annex 22, paragraph 6(b), the PP must indicate that continuing and real actions were taken to secure the CDM status for the proposed project in parallel wiith its implemantation. Making use of paragraph 8(b) of the same document, the DOE considers that the continuing and real actions necessary to the CDM implementation were performed by Organoeste Board, which could be assessed by interview approach with an ex Dourados politician/IM01/ and a declaration from an engineer/ED/ which was consulted by Organoeste Franchising at the time of initial project consideration. Both evidences above affirms that the CDM incoming was always considered as essential for the project implementation, that participates on Organoeste Board and interests initails investors reunions during the intire year of 2004 and where consulted by Organoeste Board w.r.t the project sustainability and carbon credits revenues. Therefore, the validation team concludes that previous CDM consideration was seriouly and continuos considered by the PP. The additionality was answered properly. Hence, generally Attachment A to Appendix B of the simplified modalities and procedures for small-scale CDM project activities has to be applied in order to justify the project's additionality. Despite of that please refer to raised CL B3 on section 4 of this	/IM01/		

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	report.			
B.4.2.3. How and when was the decision to proceed with the project taken? *Describe the steps taken to validate the starting date.*	Please see comments in item B.4.2.2 and rose CL B3.	/PDD/ (B.5) (C.1.1)	~~CL B3~~	OK
B.4.2.4. Is the project start date consistent with the available evidences? *Describe the evidence assessed regarding the prior consideration of the CDM (if necessary). Describe whether the evidence to support such consideration is adequately and transparently described in the PDD.*	Please see comments in item B.4.2.2 and rose CL B3.	/PDD/ (B.5) (C.1.1)	~~CL B3~~	OK
B.4.2.5. Was the decision to proceed with the project taken by a person which has the authority to do so? *Describe the steps taken to validate this issue.*	Please see comments in item B.4.2.2 and rose CL B3.	/PDD/ (B.5) (C.1.1)	~~CL B3~~	OK
B.4.2.6. How was the CDM involved in the decision making process? *Describe the steps taken to validate this issue.*	Please see comments in item B.4.2.2 and rose CL B3.	/PDD/ (B.5) (C.1.1)	~~CL B3~~	OK
B.4.2.7. Can the CDM involvement in the decision assessed as serious? *Describe whether or not the project would have been undertaken without the incentive of the CDM.*	Please see comments in item B.4.2.2 and rose CL B3.	/PDD/ (B.5) (C.1.1)	~~CL B3~~	OK
B.4.3. Identification of alternatives Step 1				

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
(in case of SSC projects pl. skip steps 1 and 2)				
B.4.3.1. Have all realistic alternatives been identified to the project? *Describe whether the list of alternatives is complete. Describe how it is validated that the alternatives are realistic.*	N/A for SSC	/PDD/ (B.1)	-	
B.4.3.2. Contains the list of alternatives at least the status-quo situation and the project not undertaken as a CDM project? *Describe the steps taken to validate this issue.*	N/A for SSC	/PDD/ (B.1)	-	
B.4.3.3. Do all identified alternatives comply with applicable regulation? *Describe the steps taken to validate this issue. Refer to the regulations.*	N/A for SSC	/PDD/ (B.1)	-	
B.4.4. Investment analysis Step 2 *In case the investment analysis as per step 2 is chosen to justify the additionality Annex 2 "Assessment of Financial Parameters" has to be used to provide additonal details of the the calculation parameters..*				
B.4.4.1. Is an appropriate analysis method chosen for the project (simple cost analysis, investment comparison analysis or benchmark analysis)? *Describe why the selected analysis method is appropriate under consideration of potential revenues and costs,*	N/A for SSC	/PDD/ (B.1)	-	

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
potential project alternatives and potential available benchmark values.				
B.4.4.2. Is a clear, viewable and unprotected Excel spreadsheet available for the investment calculation? *Describe the steps taken to validate this issue*.	N/A for SSC	/PDD/ (B.1)	-	
B.4.4.3. Does the period chosen for the investment analysis reflect the technical lifetime of the project activity or in case a shorter period is chosen, is the fair value of the project activity's assets at the end of the investment analysis period (as a cash inflow) included? *Describe how the technical lifetime / period chosen for calculating financial parameter(s) is reviewed and which documents were utilised in the course of review. Describe furthermore the approach used to check the inclusion of a potential fair value.*	N/A for SSC	/PDD/ (B.1)	-	
B.4.4.4. Is the fair value calculated in accordance with local accounting regulations (where available) or international best practice? *State the accounting regulations applied for calculating the fair value and describe why these are applicable under the project specific circumstances. Describe potential mismatches between regulations and the approach applied*	N/A for SSC	/PDD/ (B.1)	-	

Checklist Item (incl. guidance for the validation team)		Validation Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
for calculating the fair value.					
B.4.4.5.	Is the book value as well as the expectation of the potential profit or loss included in the fair value calculation?	N/A for SSC	/PDD/ (B.1)	-	
B.4.4.6.	Are depreciation and other non-cash related items added back to net profits for the purpose to calculate the financial indicator?	N/A for SSC	/PDD/ (B.1)	-	
B.4.4.7.	Is taxation excluded in the investment analysis or is the benchmark intended for post tax comparisons?	N/A for SSC	/PDD/ (B.1)	-	
B.4.4.8.	Were the input values used in the investment analysis valid and applicable at the time of the investment decision?	N/A for SSC	/PDD/ (B.1)	-	
B.4.4.9.	In case of project IRR: Are the costs of financing expenditures (loan repayments and interests) excluded from the calculation of project IRR?	N/A for SSC	/PDD/ (B.1)	-	
B.4.4.10.	In case of equity IRR: Is the part of the investment costs, which is financed by equity considered as net cash outflow and is the part financed by debt excluded in net cash outflow?	N/A for SSC	/PDD/ (B.1)	-	
B.4.4.11.	Is the type of benchmark chosen	N/A for SSC	/PDD/	-	

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
appropriate for the type of IRR calculated (e.g. local commercial lending rates or weighted average costs of capital for project IRR; required/expected returns on equity for equity IRR)?		(B.1)		
B.4.4.12. Is the benchmark value suitable for the project activity?	N/A for SSC	/PDD/ (B.1)	-	
B.4.4.13. Is it ensured that the project cannot be developed by other developers than the PP?	N/A for SSC	/PDD/ (B.1)	-	
B.4.4.14. Was the benchmark consistently used in the past for similar projects with similar risks?	N/A for SSC	/PDD/ (B.1)	-	
B.4.5. Barrier analysis Step 3 or SSC additionality assessment				
B.4.5.1. Are there any barriers given which have a clear and definable impact on the profitability of the project?	According to interviewed and the PDD, the main consumers are small farmers, which works in a very simple and small companies. Therefore, it is not possible to work with long term contracts. This affects the sales securities and the profitability of the company.	/PDD/ (B.5)	OK	
B.4.5.2. How is it justified and evidenced that the barriers given in the PDD are real?	Financing Barrier: • Difficulty of obtain financing because of guarantees required by bank.	/PDD/ (B.5)	~~CL B1~~ ~~CL B2~~	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
	• Difficulty to sell the product. • Difficulty to negotiation with rural people because they don't do long terms contracts. <u>Technological Barrier:</u> • Lack of management and/or operational know-how to conduct the activities. • Is common to the composting units produce compost with unacceptable level of coliforms (bacteria that indicates pollution) and toxic metals. • Lack of specialized workers for this kind of activity. • Technology used in this project activity had not been implemented before by the project developer. Despite of the barriers shown, please refer to rose CL B1 and B2. For details of the assessment regarding the evaluation of the barriers pl. refer to table A-4.			
B.4.5.3. How is it justified that one or a set of real barriers prevent(s) the implementation of the project activity?	Please refer to topics B.5.1 and B.5.w2 above and rose CLs B1 and B2.	/PDD/ (B.5)	~~CL B1~~ ~~CL B2~~	OK
B.4.6. Common practice analysis Step 4 (in case of SSC projects skip this step)				
B.4.6.1. Is the defined region for the common practice analysis appropriate for the technology/industry type?	N/A for SSC	/PDD/ (B.1)	-	

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
B.4.6.2. To what extent similar projects have been undertaken in the relevant region?	N/A for SSC	/PDD/ (B.1)	-	
B.4.6.3. In case similar projects are identified, are there any key differences between the proposed project and existing or ongoing projects and what kind of differences are observed?	N/A for SSC	/PDD/ (B.1)	-	
B.5. Ex-Ante Calculation of GHG Emission Reductions *It is assessed whether the ex-ante calculations of project emissions, baseline emissions, leakage emissions are stated according to the methodology and whether the argumentation for the choice of default factors and values – where applicable – is justified. Furthermore calculation of emission reductions shall be assessed.*				
B.5.1. Are the equations applied correctly according to the applied approved methodology? *Describe clearly the steps taken to assess whether The methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions.*	☐ The equations applied for calculation are correctly applied according to the approved methodology. ☒ The following mistakes have been identified in this context: Please refer to rose CARs B3, B4 and B5 on section 4 of this report.	/PDD/ (B.6.1) (B.6.3) /AMS-III.F/	~~CAR B3~~ ~~CAR B4~~ ~~CAR B5~~	OK
B.5.2. In case the methodology allows for different methodological choices, are the equations applied properly justified and have they been used reflecting the other methodological	The methodology does not allow for different methodological choices. Not applicable.	/AMS-III.F/	OK	

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
choices (i.e. baseline identification)? *Describe whether proper justification has been provided (based on the choice of the baseline scenario, context of the project activity and other evidence provided) and whether the correct equations have been used reflecting the relevant methodological choices.*				
B.5.3. Have conservative assumptions been used when calculating the project emissions? *Describe clearly the steps taken to assess whether all the assumptions and data used by the PP are listed in the PDD including references and sources and are conservatively interpreted in the PDD*.	Please refer to raised CARs on topic B.5.1.	/PDD/ (B.6.1) (B.6.3) /AMS-III.F/	~~CAR B3~~ ~~CAR B4~~ ~~CAR B5~~	OK
B.5.4. Are all data and parameters which remain fixed throughout the crediting period correct, applicable to the project and will lead to a conservative estimation of emission reductions? *Describe clearly the steps taken to assess whether the values used for the fixed parameters are considered reasonable, correct and applicable in the context of the project activity. Check esp. chapter 6.2 of the PDD*.	Please refer to raised CARs on topic B.5.1.	/PDD/ (B.6.1) (B.6.3) /AMS-III.F/	~~CAR B3~~ ~~CAR B4~~ ~~CAR B5~~	OK
B.5.5. Are all ex-ante calculation values for monitoring parameters (as defined as per chapter B.7.1) reasonable? *Describe clearly the steps taken to assess whether the values used for the monitoring parameters are considered*	☐ All "Values of data to be applied for the purpose of calculating expected emissions reductions" are considered to be reasonable, applicable and conservative. ☒ The following mistakes have been identified in this	/PDD/ (B.6.1) (B.6.3) /AMS-III.F/	~~CAR B3~~ ~~CAR B4~~	OK

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
reasonable, applicable and conservative in the context of the project activity	context: - Please refer to topic B.5.1.		~~CAR B5~~	
B.5.6. Are the emission reductions real, measurable and give long-term benefits related to the mitigation of climate change. *Describe the steps taken to validate this issue.*	The emission reductions are real, measurable and give long-term benefits related to the mitigation of climate change. In the course of validation of the baseline determination, monitoring apporach, ER calculation including respective input values have been reviewed. Althought some CARs and CLs have been raised, the emission reductions answer the methodology request. Despite of that please refer to topic B.5.1.	/PDD/ (B.6.1) (B.6.3) /AMS-III.F/	~~CAR B3~~ ~~CAR B4~~ ~~CAR B5~~	OK
B.6. Monitoring of Emission Reductions *It is assessed whether the monitoring plan is appropriate for the project activity and in line with the applied methodology.*				
B.6.1. Are all monitoring parameters required by the applied methodology contained in the monitoring plan? *Assess whether all applicable parameters listed in the methodology are included in the monitoring plan.* *Pl. check further whether the selection of parameters not to be monitored (section B.6.2) is appropriate and in line with the applied methodology.* *In case of different approaches can be chosen acc. to the methodology assess whether the selection of parameters is justified and correct.*	No, several of the monitored parameters predicted in the methodology and applicable tools were not corrected applied on the PDD. Please refer to CAR B6 on section 4 of this report for detailed assessment.	/PDD/ (B.7.1) (B.7.2) /AMS-III.F/ /TMEA/	~~CAR B6~~	OK
B.6.2. Are the means of monitoring of all parameters contained in the monitoring plan in accordance	Please refer to topic B.6.1 and rose CAR B6.	/PDD/ (B.7.1)	~~CAR B6~~	OK

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
with the requirements of the applied methodology? *Assess whether the provided information for all parameters w.r.t.* *a) Label (name of the data / parameter)* *b) data unit* *c) description* *d) source of data* *e) measurement equipment / method / procedure* *f) monitoring frequency* *g) QA/QC procedures* *are appropriately described and in compliance with the requirements of the methodology.*		(B.7.2) /AMS-III.F/ /TMEA/		
B.6.3. Have all equations necessary for ex-post emission reduction calculation been described clearly and in line with the methodology? *Check whether all necessary equations have been provided in the PDD. Pl. consider that ex-post and ex-ante calculations might be different.* *Please consider that additional equations might be necessary to calculate auxiliary parameters.*	Please refer to topic B.6.1 and rose CAR B6.	/PDD/ (B.7.1) (B.7.2) /AMS-III.F/ /TMEA/	~~CAR B6~~	OK
B.6.4. Is it likely that the monitoring arrangements described in the PDD can properly be implemented in the context of the project	Please refer to topic B.6.1 and rose CAR B6.	/PDD/ (B.7.1) (B.7.2)	~~CAR B6~~	OK

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
activity? *Assess whether the described monitoring arrangements are sufficient and realistic to enable a thorough monitoring. Pl. consider also special monitoring conditions, e.g. downtimes of monitoring equipment etc.*		/AMS-III.F/ /TMEA/		
B.6.5. Are the QA/QC procedures appropriate sufficient to ensure the emission reductions achieved from the project activit can be reported ex-post and verified? *Please consider the description given in section B.7.2. Describe which QA/QC provisions are considered. Address Quality Management System provisions, calibration and maintenance of equipment. Address further any review procedures.*	Please refer to topic B.6.1 and rose CAR B6.	/PDD/ (B.7.1) (B.7.2) /AMS-III.F/ /TMEA/	~~CAR B6~~	OK
B.6.6. Are procedures identified for data management? *Check whether appropriate provisions are considered for data management including responsibilities, what records to keep, storage area of records and how to process performance documentation* *Check further the data archiving provisions for the project activity and ensure that provisions are made to archive data for the whole crediting period + 2 years.*	Please refer to topic B.6.1 and rose CAR B6.	/PDD/ (B.7.1) (B.7.2) /AMS-III.F/ /TMEA/	~~CAR B6~~	OK
C. Duration of the Project/ Crediting Period *It is assessed whether the temporary boundaries of the project are clearly defined.*				

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
C.1. Is the project's starting date clearly defined and evidenced? *Check whether the starting date is correct. Apply the definition of the project starting date as per the "Glossary of CDM terms".*	The starting date considered in the first version of PDD was the "start test operation of Organoeste first composting plant". Despite of that, on the reviewed version of PDD the identified starting date was determined according to the issuance of Dourados Operational License/OLOD/, the first plant to initiate operation. Please refer to rose CAR C1 on section 4 of this report for more detailed information.	/PDD/ (C.1.1) /OLOD/	~~CAR C1~~	OK
C.2. Is the project's operational lifetime clearly defined and evidenced? *Check whether the project lifetime is correctly defined. Consider the guidance on the assessment of investment analysis (annex to the addionality tool).* *Check in case of phased implementation this has been reflected throughout the whole PDD incl. the financial assessment, if applicable*.	The operational lifetime mentioned in PDD is 21 years. Despite of that please refer to rose CL C1 on section 4 of this report. Referring both	/PDD/ (C.1.2)	~~CL C1~~	OK
C.3. Is the start of the crediting period clearly defined and reasonable? *Check whether the envisaged starting date of the crediting period is realistic, taking into consideration the times needed for validation and registration.*	Please refer to topic C.1 and rose CAR C1.	/PDD/ (C.1.1) (C.2.1.1)	~~CAR C1~~	OK
D. Environmental Impacts *Documentation on the analysis of the environmental impacts will be assessed, and if deemed significant, an EIA should*				

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
be provided to the DOE.				
D.1.1. Are there any Host Party requirements for an Environmental Impact Assessment (EIA)? *Check the host party regulations, regarding EIA.*	The host government does not request for an EIA. To be in line with Brazilian Law and requirements the Environmental Study was performed at the time of the Environmental License issuance. Please refer to topic D.1.3 below.	/PDD/ (D.1) /EPOD/ /PEAMOD/	OK	
D.1.2. In case an Environmental Impact Assessment (EIA) is requested by the host party, has it been carried out and if applcable duly approved? *Check the EIA and its approval, if applicable.*	No Environmental Impact Assessment (EIA) is requested by the host party. Please refer to topic D.1.1 above.	/PDD/ (D.1)	OK	
D.1.3. Has an analysis of the environmental impacts of the project activity been sufficiently described and in line with the host party environmental legislation? *Check the PDD (section D). Check whether the project will create any adverse environmental effects.* *Check the relevant national environmental legislation.*	According To Brazilian legislation an Environmental Study is necessary at the time of the Environmental License issuance, which is the initial step for the implementation of an Enterprise in the host country. At that moment, an Environmental Study must be taken to assure that the company operation is environmentally safe and sound. Considering that the Brazilian local Environmental bodies have issued the Environmental license for both plants predicted to operate in the project activity, the validation team assumes that the Environmental Study was appropriately assessed. During the visit it was shown to validation team the environmental documentation requested by local environmental agencies/EPOD//PEAMOD/.	/PDD/ (D.1) /EPOD/ /PEAMOD/	OK	
D.1.4. Are transboundary environmental impacts	No transboundary impacts could be identified for the	/PDD/	OK	

Checklist Item (incl. guidance for the validation team)	**Validation Team Comments** (Means and results of assessment)	**Ref.**	**Draft Concl.**	**Final Concl.**
considered in the analysis? *Check the documents and local official sources / expertise regarding transboundary environmental impacts.*	proposed project activity.	(D.1) /EPOD/ /PEAMOD/		
E. Stakeholder Comments *The DOE should ensure that stakeholder comments have been invited with appropriate media and that due account has been taken of any comments received.*				
E.1. Have relevant local stakeholders been invited to consultation prior to the publication of the PDD? *Check by means of document review and interviews with local stakeholders if and when a local stakeholder consultation process has been carried out*.	Is necessary to send to validation team the Stakeholder consultation process evidence. Please refer to rose CAR E1 on section 4 of this report.	/PDD/ (E.1.) /AR/ /dna/ /R7/ /LSH/	~~CAR E1~~	OK
E.2. Can the local stakeholder consultation process be assessed as adequate? *Describe what assessment steps have been undertaken to assess the adequacy of the stakeholder consultation process. Give a final opinion on the adequacy.* *Please consider the following requirements in this context:* *(a) Comments by local stakeholders that can reasonably be considered relevant for the proposed CDM project activity,*	Please refer to topic E.1 above.	/PDD/ (E.1.) (E.2) /AR/ /dna/ /R7/ /LSH/	~~CAR E1~~	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (Means and results of assessment)	Ref.	Draft Concl.	Final Concl.
have been invited; *(b) The summary of the comments received as provided in the PDD is complete;* *(c) The project participants have taken due account of any comments received and have described this process in the PDD.*				

ANNEX 2: ASSESSMENT OF BASELINE IDENTIFICATION

Table A-2: Assessment of Baseline Identification

☐	Baseline is not identified
☒	Assessment of baseline see below

Baseline Alternatives identified	Inline with the Methodology?	Eliminated	Reasons for elimination / non-elimination from list of alternatives	Evidence used	DOE Assessment	
					Appropriateness of elimination	Assessment of validation team (results and means of assessment)

Uses the solid waste to produce organic fertilizer without the CDM project implementation.	☒	☒	Two explanations were used to discard this alternative: 1 – Problem while obtaining financing: the new technology used in the project activity requires an initial investment for buying the necessary equipments and develop the better composting process for the proposed project. The project does not acquire any type of financing through BNDES (National Economic and Social Development Bank) principally because it is a small company and did not have any assets to provide as guarantee for the financing. 2 – The market finds difficulties while selling the organic compost instead of the mineral fertilizer; which is the common practice in the region.	/IPT 200/ /PDD/ /IM02/	☒	It could be evidenced during on-site visit that the company it is very small and simple. No BNDES financing could be acquired due to the limited financial operation of the plant. It could be evidences that the inorganic fertilizer it is the common practice in the regions and that the composted product faces difficulties for selling.
Disposal of the solid waste in a landfill (Dourados and Andradina municipal landfills), continuation of common practices.	☒	☐	This alternative is a continuation of current situation.	/IBGE 2002/ /PDD/	☐	This alternative is the common practice in the region and do not faces any technological, financial and licensing barriers. According to IBGE (2002) 92.5% of the total waste produced in Brazil is destined to landfills.

Disposal in a landfill that flare the captured gas, without generation electricity or heat.	☒	☒	There is no requirement of laws in Brazil that obligate this king of practice. Additionally, there is no project activity implemented in Brazil with forced methane extraction and destruction, using blowers, collection system and flaring system, without the CDM incentive	/NCCP/ /PL N^{o} 1991/2007/ /PDD/	☒	According the local Brazilian Law no methane flare it is necessary in operational landfills. Additionally, it could be evidenced that all landfills that flare methane in Brazil are requesting CERs incoming for its health financial operation.
Disposal in a landfill that captures the gas and flare to generation of electricity.	☒	☒	This alternative faces even more difficulties when comparing it to alternative 3. There is no requirement of laws in Brazil that obligate this king of practice. Additionally, there is no project activity implemented in Brazil with based biogas electricity generation, without the CDM incentive	/NCCP/ /PL N^{o} 1991/2007/ /PDD/	☒	According the local Brazilian Law no electricity generation from biogas sources it is necessary in operational landfills. Additionally, it could be evidenced that all landfills that applies this scenario in Brazil are requesting CERs incoming for its health financial operation and must receive a large scale of waste to assure the electricity generation, which is not the case of the Dourados and Andradina landfills that works with small amounts if daily incoming of waste.

ANNEX 3: ASSESSMENT OF FINANCIAL PARAMETERS

Table A-3: Assessment of Financial Parameters

☒	No financial parameters are used for additionality justification
☐	Assessment of all financial parameters see below

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE ASSESSMENT		
					Correctness of value applied	Appropriateness of information source	Comment
-	-	-	-	-	☐	☐	-

ANNEX 4: ASSESSMENT OF BARRIER ANALYSIS

Table A-4: Assessment of Barrier Analysis

☐	No barrier parameters are used for additionality justification
☒	Assessment of barriers see below

Kind of Barrier (invest, tech, other)	Description of Barrier	Evidence used	Assessment of validation team	
			Appropriateness of information source	Explanation of final result
Financing	- Difficulty of obtain financing because of guarantees required by bank. - Difficulty to sell the product. - Difficulty to negotiation with rural people because they don't do long terms contracts.	/IPT 200/ /PDD/ /IM02/	☒	It could be evidenced during on-site visit that the company it is very small and simple. No BNDES financing could be acquired due to the limited financial operation of the plant. It could be evidences that the inorganic fertilizer it is the common practice in the regions and that the composted product faces difficulties for selling the final product. As the project is located in a very small and simple location it is difficult to obtain long terms contracts which could benefit the financial health of the plant. During the on-site visit using interview approach it could be evidenced all above information.

Technological	- Lack of management and/or operational know-how to conduct the activities. - Is common to the composting units produce compost with unacceptable level of coliforms (bacteria that indicates pollution) and toxic metals. - Lack of specialized workers for this kind of activity. - Technology used in this project activity had not been implemented before by the project developer.	/IPT 200/ /Silva 2005/ /PDD/ /IM02/	☒	According to IPT 2002 the waste composition received for the composting process is very unconstraint, which turn the composting process with lack of a proper management and operational know-how to conduct the composting activity. Additionally, Silva et all (2005) mentions that the final product commonly presents unacceptable levels of pollutants. Moreover, during on-site visit it could be evidenced the effort put on the composting process so it could have all necessary special condition for a proper final product production.
Prevailing practice	Common practices.	/IPT 200/ /PDD/ /IM02/	☒	According to IBGE 2002, only 4.4% of the total waste produced in Brazil is composted treated. At the state of Mato Grosso, the composted handled waste is even smaller (2.2%). The big majority is handled on landfills.

ANNEX 5: OUTCOME OF THE GSCP

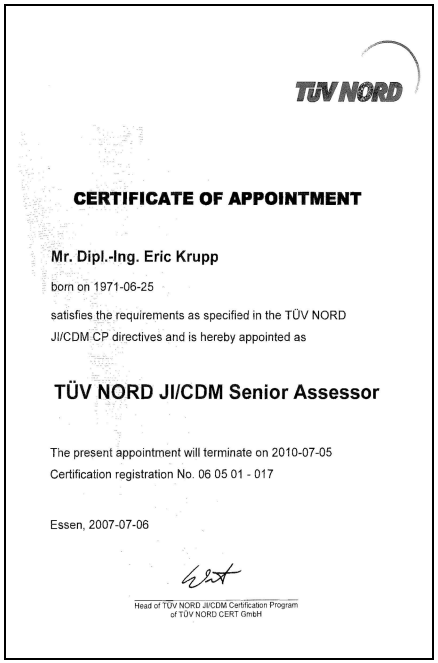
Table A-5: Outcome of the Global Stakeholder Consultation Process

☒	No comments were received during the global stakeholder consultation period
☐	Comments were received during the global stakeholder consultation period. The comments (in unedited form) and the consideration/response of the validation team are presented below:

Comment No.:	Comment by:	Inserted on:	Subject	Comment *)	Response validation team *)	Conclusion (incl. CARs CLs or FARs)

*) In case clarifications have been requested by the validation team corresponding rows shall be added

ANNEX 6: APPOINTMENT CERTIFICATES OF TEAM MEMBERS



TÜV NORD

CERTIFICATE OF APPOINTMENT

Mr. Dipl.-Ing. Eric Krupp

born on 1971-06-25

satisfies the requirements as specified in the TÜV NORD JI/CDM CP directives and is hereby appointed as

TÜV NORD JI/CDM Senior Assessor

The present appointment will terminate on 2010-07-05

Certification registration No. 06 05 01 - 017

Essen, 2007-07-06

Head of TÜV NORD JI/CDM Certification Program of TÜV NORD CERT GmbH

TÜV NORD

CERTIFICATE OF APPOINTMENT

Mr. Dipl-Ing. Rainer Winter

born on 1963-02-21

satisfies the requirements as specified in the TÜV NORD JI/CDM CP directives and is hereby appointed as

TÜV NORD JI/CDM Senior Assessor

The present appointment will terminate on 2010-07-05

Certification registration No. 04 02 154-03

Essen, 2007-07-06

Deputy of TÜV NORD JI/CDM Certification Program of TÜV NORD CERT GmbH

TÜV NORD

CERTIFICATE OF APPOINTMENT

Ms. Alexandra Nebel

born on 1980-07-25

satisfies the requirements as specified in the TÜV NORD JI/CDM CP directives and is hereby appointed as

TÜV NORD JI/CDM Expert

For the following scopes: 1, 14, 15

The present appointment will terminate on 2012-02-03

Certification registration No. 09 02 01 - 95

Essen, 2009-02-04

Head of TÜV NORD JI/CDM Certification Program of TÜV NORD CERT GmbH

TÜV NORD

CERTIFICATE OF APPOINTMENT

Ms. Inga Nagel

born on 1971-12-12

satisfies the requirements as specified in the TÜV NORD JI/CDM CP directives and is hereby appointed as

TÜV NORD JI/CDM Assessor

For the following scopes: 1, 8, 13, 14, 15

The present appointment will terminate on 2012-01-15

Certification registration No. 09 01 01 - 45

Essen, 2009-01-16

Head of TÜV NORD JI/CDM Certification Program of TÜV NORD CERT GmbH