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Validation Report

AGCERT INTERNATIONAL LIMITED, IRELAND

Validation of the AWMS Methane Recovery Project BR06-S-29, São Paulo , Brazil

Report No. 852854, rev. 0

February 25th, 2007

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

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Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
852854	February 25, 2007	0	---	---
Subject:		Validation of a CDM Project		
Executing Operational Unit:		TÜV SÜD Industrie Service GmbH Carbon Management Service Westendstr. 199 - 80686 Munich Federal Republic of Germany		
Contact:		www.tuev-sued.de		
Client:		AgCert International PLC, Ireland Sandyford Business Park The Apex Building Dublin 18, Ireland		
Contract approved by:		Werner Betzenbichler		
Report Title:		Validation of the AWMS Methane Recovery Project BR06-S-29, São Paulo , Brazil		
Number of pages		22 (excluding annexes and cover page)		

Summary:

The Certification Body ”Climate and Energy” has been ordered by AgCert International PLC, Ireland (AgCert International) to perform a validation of the above mentioned project.

In summary, it is TÜV SÜD´s opinion that the project “AWMS Methane Recovery Project BR06-S-29, São Paulo , Brazil”, as described in the revised project design document of January 31, 2007 meets all relevant UNFCCC requirements for the CDM, set by the Kyoto Protocol, the Marrakech Accords and relevant guidance by the CDM Executive Board and that the project furthermore meets all relevant host country criteria and correctly applies the baseline and monitoring methodology Type III, Other Project Activities, Category III.D., Methane Recovery, version 11 for small-scale projects.

Hence, TÜV SÜD will recommend the project for registration as CDM project activity by the CDM Executive Board.

Additionally the assessment team reviewed the estimation of the projected emission reductions. TÜD SÜD confirms that the indicated amount of emission reductions of 228,194 tonnes CO_{2e} over a crediting period of ten years, resulting in a calculated annual average of 22,819 tonnes CO_{2e} represents a reasonable estimation using the assumptions given by the project documents.

Work carried out by:	Markus Knödlseder Sandro Marostica	Internal Quality Control by:	Werner Betzenbichler

Abbreviations

AgCert Brazil	AgCert Do Brasil Solucoes Ambientais Ltda.
AgCert International	AgCert International PLC, Ireland
AWMS	Animal Waste Management Systems
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CR	Clarification Request
DOE	Designated Operational Entity
EIA / EA	Environmental Impact Assessment / Environmental Assessment
ER	Emission reduction
GHG	Greenhouse gas(es)
KP	Kyoto Protocol
MP	Monitoring Plan
PDD	Project Design Document
SSC	Small Scale Project
TÜV SÜD	TÜV SÜD Industrie Service GmbH
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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1 INTRODUCTION

1.1 Objective

AgCert International PLC, Ireland (AgCert International) has commissioned TÜV SÜD Industrie Service GmbH (TÜV SÜD) to validate the AWMS Methane Recovery Project BR06-S-29, São Paulo, Brazil. The validation serves as design verification and is a requirement of all CDM projects. The purpose of a validation is to have an independent third party assess of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria. Validation is a requirement for all CDM projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reductions (CERs).

UNFCCC criteria refer to the Kyoto Protocol criteria and the CDM rules and modalities as agreed in the Bonn Agreement and the Marrakech Accords.

1.2 Scope

The validation scope is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. TÜV SÜD has, based on the recommendations in the Validation and Verification Manual employed a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of CERs.

The audit team has been provided with the first PDD-version in July 2006. Based on this documentation a document review and a fact finding mission in form of an on site audit has taken place. The demanded additional information is addressed in annex 1. Requested information was given and the PDD was updated accordingly. That final PDD version 5 was submitted on January 31, 2007 and serves as the basis for the final assessment presented herewith. The changes were not significant as only some information was added and adapted to the final PDD, thus the global stakeholder process was not repeated.

Studying the existing project documentation, it was obvious that the competence and capability of the validation team has to cover at least the following aspects:

- Knowledge of Kyoto Protocol and the Marrakech Accords
- Environmental and Social Impact Assessment
- Skills in environmental auditing (ISO 14000, EMAS)
- Quality assurance
- Agricultural operations especially regarding manure management
- Technical aspects of gas flaring and bio digester operation
- Monitoring concepts

- Political, economical and technical random conditions in host country

According to these requirements TÜV SÜD has assembled a project team in accordance with the appointment rules of the TÜV certification body “climate and energy”:

Markus Knödlseder is an auditor for climate change projects and GHG emission inventories at the department “Carbon Management Service” in the head office of TÜV SÜD in Munich. He has been involved in the topic of environmental auditing, baselining, monitoring and verification due to the requirements of the Kyoto Protocol since Oct. 2001. His main focus lies on renewable energies.

Sandro Marostica is a Food Engineer with an MBA from IMD, Lausanne Switzerland. He has acquired his first experiences in the CDM market in 2004 through the creation of his broker dealer company in the UK to negotiate CER forward contracts from CDM projects in Brazil. Based in Brazil he has been working for TÜV SÜD since April 06 as General Manager and GHG auditor, and is familiar with local laws and regulations.

In order to have an internal quality control of the project, a team of the following persons has been composed by the certification body “climate and energy”:

Werner Betzenbichler (project manager, GHG lead auditor)

1.3 GHG Project Description

This project proposes to apply to multiple swine Confined Animal Feeding Operations (located in São Paulo, Brazil) a GHG mitigation methodology which is applicable to intensive livestock operations. The proposed project activities will mitigate AWMS GHG emissions in an economically sustainable manner, and will result in other environmental benefits, such as improved water quality and reduced odor. The project proposes to move the designated farms from a high-GHG AWMS practice; an open air lagoon, to a lower-GHG AWMS practice; an ambient temperature anaerobic digester with the capture and combustion of the resulting biogas. The concluding purpose of this project is to mitigate animal effluent related GHG by improving AWMS practices. In total 1 farm with 1 site is contracted in the State of São Paulo, Brazil.

Project participant is AgCert Do Brasil Solucoes Ambientais Ltda. Host Party of the project activity is Brazil.

The category of the project activity is in Scope 13 - Waste Handling and Disposal, and Scope 10 – Fugitive emissions from fuels (solid, oil and gas). The approved and applied baseline and monitoring methodology is Type III, Other Project Activities, Category III.D Methane Recovery for small scale project activities, version 11. According to the PDD and involved parties the starting date of the project activity is August 11th, 2005. The crediting period is committed as 10 years fixed crediting period and it starts on 01/06/2007.

2 METHODOLOGY

The validation of the project consists of the following three phases:

- Desk review
- Follow-up interviews
- Resolution of clarification and corrective action requests

In order to ensure transparency, a validation protocol was customized for the project, according to the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organizes details and clarifies the requirements a CDM project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The validation protocol consists of three tables. The different columns in these tables are described in Figure 1.

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

Validation Protocol Table 1: Mandatory Requirements			
Requirement	**Reference**	**Conclusion**	**Cross reference**
The requirements the project must meet.	Gives reference to the legislation or agreement where the requirement is found.	This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) of risk or non-compliance with stated requirements. The corrective action requests are numbered and presented to the client in the Validation report.	Used to refer to the relevant checklist questions in Table 2 to show how the specific requirement is validated. This is to ensure a transparent Validation process.

Validation Protocol Table 2: Requirement checklist				
Checklist Question	**Reference**	**Means of verification (MoV)**	**Comment**	**Draft and/or Final Conclusion**
The various requirements in Table 1 are linked to checklist questions the project should meet. The checklist is organised in seven different sections. Each section is then further subdivided. The lowest level constitutes a	Gives reference to documents where the answer to the checklist question or item is found.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the	This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification is used when the validation team has identified a need for

checklist question.			conclusions reached.	further clarification.

Validation Protocol Table 3: Resolution of Corrective Action and Clarification Requests			
Draft report clarifications and corrective action requests	**Ref. to checklist question in table 2**	**Summary of project owner response**	**Validation conclusion**
If the conclusions from the draft Validation are either a Corrective Action Request or a Clarification Request, these should be listed in this section.	Reference to the checklist question number in Table 2 where the Corrective Action Request or Clarification Request is explained.	The responses given by the Client or other project participants during the communications with the validation team should be summarized in this section.	This section should summarize the validation team's responses and final conclusions. The conclusions should also be included in Table 2, under "Final Conclusion".

Figure 1 Validation Protocol Tables

2.1 Review of Documents

The project design document submitted by the client and additional background documents related to the project design and baseline were reviewed. The audit team has been provided with the first PDD-version issued on July, 2006, which had been made public on www.netinform.de. The project design document was assessed by some revisions addressing changes to the baseline and monitoring methodology requested by the CDM Executive Board and clarification requests issued by TÜV SÜD. The final updated PDD version 5, issued on January 31, 2007 serves as the basis for the assessment presented herewith.

2.2 Follow-up Interviews

In August 2006 TÜV SÜD performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of the farms and AgCert Do Brasil Solucoes Ambientas Ltda were interviewed. The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	**Interview topics**
Representatives of the farms	• Project design • Technical equipment • Sustainable development issues • Additionality • Crediting period • Monitoring plan

	• Management system • Environmental impacts • Stakeholder process
AgCert Brasil	• Project design • Technical equipment • Sustainable development issues • Baseline determination • Additionality • Crediting period • Monitoring plan • Environmental impacts • Stakeholder process • Approval by the host country

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation was to resolve the requests for corrective actions and clarification and any other outstanding issues which needed to be clarified for TÜV SÜD's positive conclusion on the project design. The Corrective Action Requests (CAR) and Clarification Requests (CR) raised by TÜV SÜD were resolved during communications between the Client and TÜV SÜD. To guarantee the transparency of the validation process, the concerns raised and responses that have been given are summarized in chapter 3 below and documented in more detail in the validation protocol in Annex 1.

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

3 VALIDATION FINDINGS

In the following sections the findings of the validation are stated. The validation findings for each validation subject are presented as follows:

1) The findings from the desk review of the project design documents and the findings from interviews during the follow up visit are summarized. A more detailed record of these findings can be found in the Validation Protocol in Annex 1.

2) Where TÜV SÜD had identified issues that needed clarification or that represented a risk to fulfil project objectives, a Clarification Request or Corrective Action Request, respectively, have been issued. The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Validation Protocol in Annex 1. The validation of the project resulted in Clarification and Correction Action Requests.

3) Where Clarification or Corrective Action Requests have been issued, the exchanges between the Client and TÜV SÜD to resolve these Clarification or Corrective Action Requests is summarized.

4) The final conclusions for validation subject are presented.

The validation findings relate to the project design as documented and described in the final project design documentation.

3.1 General Description of Project Activity

3.1.1 Discussion

The project participant is AgCert Do Brasil Solucoes Ambientais Ltda. The project is developed by AgCert International, Ireland. Brazil as the host Party meets all relevant participation requirements.

The objective of the project ”AWMS Methane Recovery Project BR06-S-29, São Paulo, Brazil” is to apply to the farm GHG mitigation measures which will mitigate GHG emissions in an economically sustainable manner. The project foresees to replace the open air lagoons by positive pressure covered lagoon cells, creating ambient temperature anaerobic digesters.

The project design does reflect current good practice. The design has been professionally developed. A validation of the compatibility of the single components carried out by the project developer resulted in a positive conclusion. The project does moreover apply state of the art equipment.

The project boundaries are clearly defined. The project includes 1 farm with installations of digesters at 1 site being contracted in the State of São Paulo, Brazil. During this assessment TÜV SÜD contacted and visited the sites indicate on the Information Reference List. As the project participant is operating/developing several similar CDM projects in the same or neighboring region, the validation process has shown that no farm of this project is included in any other existing PDD.

The project equipment can be expected to run for the whole project period and it can not be expected that it will be replaced by more efficient technologies.

Initial training and maintenance efforts are required. In the PDD and during the visit on site the project developer confirmed that such training has taken place and/or is envisaged. Documentation on executed and/or planned training activities has been submitted.

The project is currently in line with the relevant legislation and plans in the host country. The required environmental licenses are valid and have been submitted to the validation team.

The project is considered to be in line with the sustainable development policies of Brazil as improvements to manure management as well as energy supply are relevant issues in the national Brazilian policy. The final letter of approval by the Brazilian DNA will confirm the opinion of the DOE.

The funding for the project does not lead to a diversion of official development assistance, as according to the information obtained by the audit team, ODA does not contribute to the financing of the project.

The project starting date and the operational lifetime are clearly defined. The crediting period is clearly defined.

3.1.2 Findings

Corrective Action Request 1:

It should be added in the description of the project activity that project emissions occur and a short description of what they are.

Answer: Section A.2 of the PDD describes emissions of VOC's.

Corrective Action Request 2:

Information on stakeholder process and chronogram for implementation of biodigestors has to be uploaded on the extranet, or be submitted to the validation team.

Answer: Requested information has been posted to the PDD supporting documents portal. See SHM (BR-PS-SP-03-29-2005)

chronogram for implementation

15/11/06	Start
01/01/07	25%
01/02/07	50%
01/03/07	80%
15/03/07	90%
30/03/07	100%
Training: 1st. week of April	

Clarification Request 1:

The description of the technology to be applied provides a sufficient and transparent input to evaluate its impact on the greenhouse gas balance. However, it is not clear to the validation team whether the farm will use an enclosed flare as it is described in the PDD. The validation team asks for a technical description including a technical drawing of the flare, where it is mentioned that farms are equipped with an enclosed flare and not an open flare, and for an manufacturer evidence about the estimated efficiency.

Answer: An updated drawing of the enclosed flare has been posted to the PDD supporting documents portal. Please see Plano I Ground Level Flare in the "Components/Users Manuals" section.

Corrective Action Request 3:

Since the time of PDD preparation, the farm has undergone expansion. Recently built lagoons and barns should be updated in the PDD.

Answer: The PDD has been updated to reflect the farm expansion.

The capacity in PDD has been updated.

Clarification Request 2:

The number of biodigestor modules and its sizes should be mentioned in the PDD.

Answer: The PDD clearly states digesters shall be sized sufficiently per project.

Clarification Request 3:

The related documentation (signed participation list and/or date of the scheduled trainings) should be submitted to the validation team or to the TUV Support Documentation Panel.

Answer: Construction hasn't started yet. Training documentation will be available as soon as construction is over.

Proposed schedule:

15/11/06	Start
01/01/07	25%
01/02/07	50%
01/03/07	80%
15/03/07	90%
30/03/07	100%
Training: 1st. week of April	

Corrective Action Request 4:

The biodigester is scheduled to be 100% implemented by 30/03/07, but the crediting period starts in Feb 07. Please confirm that emissions reductions are adjusted for such mismatch.

Answer: The Project's crediting period starting date has been changed to June 1, 2007 therefore, no adjustment is required.

Clarification Request 4:

Recently built lagoons (nr. 13 to 16) have a retention time below 21 days, as they were built to be temporary. However, given the schedule for commissioning of biodigestors, AgCert is requested to inform how retention time will be dealt with for those lagoons, before biodigestors become operational. It is also advisable to add into the PDD that those small lagoons are for temporary use until the biodigestors are in use.

Answer: If you divide the cost of the recently built lagoons (R$ 25,000) by their total volume you will get the cost per m3. With the cost per m3 you can easily get to the cost of lagoons for 30 HRT which would be business as usual. The 8 new lagoons have a volume of roughly 960 m3

built at a cost of approximately R$26.00 per m3; at this price the farmer would have to spend R$140,000 to build 30 HRT lagoons for the expansion (not considering that the larger the lagoons are the lower is the cost per m3 because it dilutes the machines mobilization cost). The digester AgCert is building at Fazenda São Domingos will cost R$ 1,100,000.00 Therefore the biodigester is more expensive than business as usual.

Clarification Request 5:

AgCert should provide a general explanation to the validation team on how it will make sure that debundling will not take place over the time. AgCert should inform what monitoring measures are fulfilled to guarantee that no debundling from SSC projects to SSC projects occurs.

Answer: All projects are plotted using “Google Earth” to ensure locations are not creating a debundling issue. Precise GPS coordinates have been included in the PDD.

These distances will be considered if at some time in the future AgCert is to build additional digester(s).

3.1.3 Conclusion

All Clarification Requests and Corrective Action Request are considered to be resolved.

S. Domingos farm has undergone a rapid expansion since the validation audit visit. The PDD has been adjusted to reflect such expansion and evidences were provided to show that new small lagoons were built to be an interim solution until the commissioning of the biodigesters, and that the costs of the biodigesters are higher than the costs to built adequate lagoons (business as usual).

Further details to that conclusion are documented in annex 1 of that validation report.

3.2 Baseline Methodology

3.2.1 Discussion

The project is based on the approved methodology: “Type III, Other Project Activities, Category III.D., Methane Recovery for small-scale projects, version 11”. The methodology has been approved by the CDM Executive Board. The selected methodology has been designed for this project and hence the project is part of the methodology on which it is build upon. Therefore the respective baseline methodology is deemed to be the most applicable one for this project. The PDD responds convincingly to each of the applicability criteria which are outlined in the baseline methodology.

The application of the methodology and the discussion and determination of the baseline are transparent. The application follows exactly each of the steps outlined in the methodology and answers the corresponding sections in a proper manner.

The baseline is been determined using reliable assumptions. The parameter “population” as one of the decisive parameters for the quantitative prognosis is determined by using reliable data and is moreover based on date obtained from a year period in the past. During the visit on site the availability of such comprehensive data could be observed predominantly. Hence plausible data has been provided from traceable sources ensuring the reliability of the parameter.

The baseline has been based on project specific data and does sufficiently take into account policies and developments regarding legal, economic and social issues. There is no legal requirement to capture and combust greenhouse gases produced by swine manure in AWMS.

There is currently also no planned legislation that is directed towards the emission of GHG as related to AWMS. The open air lagoon is hence considered the common AWMS practice in Brazil.

The project demonstrates that it is not the baseline scenario. Each step of the respective section of the methodology has hereby been applied in a correct manner. The elaborations in the PDD got substantiated by an external expert review. Concluding it has been made clear that the continuation of the AWMS by operating open air lagoons would be the most attractive course of action and hence the baseline scenario. During the visit on site the project owner substantiated these arguments by describing the financial result of the operations in the last two years.

The economic performance, the legal constraints and the common practice have been identified as potential risks to the baseline. The subsequent evaluation resulted in the assessment that no major risks to the baseline exist. This assessment is considered as being plausible.

References have been made to all data sources used.

3.2.2 Findings

Corrective Action Request 5:

The project developer shall add the Version number to the title of the approved baseline methodology, in order to create a clear reference.

Agcert shall switch to new approved methodology version 11.

Answer: The methodology has been submitted for review.

Clarification Request 6:

Within he project boundary it should mention the occurrence of project emissions and in those cases what project emissions, according to the methodology definition (CO2 emissions from use of fossil fuels or electricity for the operation of the facility), will occur after the implementation of the project activity and include them in the figure “B1 project boundary.

Answer: Direct project emissions are addressed in the PDD.

Clarification Request 7:

It has to be indicated in the PDD date of completion in *DD/MM/YYYY a*nd contact information and indicate whether the person/entity is also a project participant, as listed in Annex 1.

Answer: This information is included in the PDD.

3.2.3 Conclusion

It can be stated that it has been made plausible that the chosen baseline scenario is the one deemed most realistic under the given frame conditions.

Further details to that conclusion are documented in annex 1 of that validation report.

3.3 Duration of the Project / Crediting Period

3.3.1 Discussion

Both the starting date of the project activity and the crediting period are clearly determined as well as the lifetime of the project activity and the length of the fixed crediting period of 10 years.

3.3.2 Findings

None

3.3.3 Conclusion

Duration of the Project and its Crediting Period are appropriated.

3.4 Monitoring Plan

3.4.1 Discussion

The project is based on the approved monitoring methodology “Type III, Other Project Activities, Category III.D., Methane Recovery for small-scale projects, version 11”. The methodology has been approved by the CDM Executive Board.The selected methodology has been designed for this project and hence the project is part of the methodology it is build upon. Therefore the respective monitoring methodology is deemed to be the most applicable one for this project. The PDD responds convincingly to each of the applicability criteria which are outlined in the monitoring methodology.

Details of the methodology as parameters to be obtained, recording frequency and archiving methods are considered being reasonable and appropriate.

The methodology and its application are described in detail and in a transparent manner. During the visit on site the implementation of the operations and maintenance manual and the data management system in order to ensure a proper implementation of the monitoring plan could be evidenced.

The monitoring plan does include all relevant parameters to determine baseline and project emissions and it is possible to monitor and/or measure the currently specified GHG indicators. The indicators which are not measured can be obtained from IPCC documents. The parameters defined allow calculating the baseline and projecting emissions in a proper manner.

According to the methodology no leakage calculation is required.

The project is considered to have no negative environmental, social and economic effects and a monitoring of such data is also not required by the applied monitoring methodology. This approach is deemed sufficient.

The PDD in combination with the Operations and Maintenance Manual does clearly indicate the authority and responsibilities within the given project structure. During the visit on site it has been described in detail how the respective organizational structure is already implemented and/ or planned. During the visit on site the validation team moreover realized that the project owner is well aware of the tasks and responsibilities.

The overall management responsibility is with AgCert International, Ireland. The company operates also trained staff in Brazil. The farm owner or representatives supports the AgCert staff during the on site audits and carries out the daily supervision of the project components and their performance. The responsibilities for each task are clearly defined and allocated to the Farm owners, AgCert and the service providers.

The quality and environmental management system (QMS and EMS), currently under implementation within AgCert, will help to support the project participants in operating the respective organizational structure.

3.4.2 Findings

Clarification Request 8

The monitoring of project emissions is not explicitly required according to applied methodology; however AgCert is requested to comment on how they would like to monitor potential project emissions in case they occur.

Answer: The methodology requires inclusion of considering direct project activities emissions to include CO2 emissions from use of fossil fuels and other potential project emissions. The methodology does not require monitoring of potential project emissions; however AgCert has standard operating practices that include operational and visual checks that would indicate any additional project emissions in case they occur.

Clarification Request 9:

Not all formulae and parameters used to determine baseline emission are clearly indicated:

1, The following abbreviations used in the Table E2 has to be explained in the PDD:

- Days OB
- BW kg
- Cap EF

2. It shall be explained, how the emission factors for finisher (33,82) was calculated. Even if it is less than the calculated emission factor of 49,52 and hence more conservative, it should be made a note with a brief explaination. Those default values shall be noted in the PDD.

3. It should be explained how the information on genetics of the farm can be proper monitored in order to guarantee that it uses North American and/or European genetics.

Answer: Requested abbreviations have been included in the PDD. Factors are weight adjusted based on animal weights. Since these animals are smaller, they produce less manure thus the EF is smaller. As has been previously discussed, pork producers cannot sustain a profitable business without the use of North American and/or European genetic stock.

Clarification Request 10:

Table E6 of the PDD shows the uncertainty parameters. However, it is not determined the uncertainty level for each ID. AgCert should add this information.

Answer: Uncertainty factors are addressed in the Monitoring Plan.

Clarification Request 11

AgCert shall explain what monitoring measures will be taken in order to guarantee sealed and fully calibrated flow meters after commissioning.

Answer: Flow meters are supplied by the manufacturer calibrated and sealed. They are supplied with a certificate of calibration.

3.4.3 Conclusion

The QA/QC manual for all involved staff and their responsibility regarding monitoring is ruled sufficiently. Signed contracts are submitted to the validation team.

The validation team can not identify any risks due to inadequate management structure or quality assurance.

Further details to that conclusion are documented in annex 1 of that validation report.

3.5 Calculation of GHG Emissions by Source

3.5.1 Discussion

The project spatial boundaries are clearly described and limited to the farm site. An exact and correct description of the project boundaries is included in chapter B.4 of the PDD. The PDD hereby also reflects correctly that emissions from barn systems and barn flushing systems are not considered as these emissions are not affected by the proposed practice change.

The projects components are clearly defined in the PDD and described in figure B1 of the PDD. During the visit on site the given information has been confirmed.

Details of direct and indirect emissions are discussed in the PDD in an appropriate manner. All aspects are covered by the current approach. All methane (CH4) emissions have been considered. The calculations resulting in the final numbers have been submitted. The formulae used are correctly applied.

Since most estimates are derived from accepted international sources, it seems reasonable to assume that they are accurate. The approach is deemed sufficient.

A leakage calculation is not necessary according to the methodology.

Concluding it can be stated that the project emissions will be reduced compared to the baseline scenario by 228,194 tonnes CO2e over a crediting period of ten years, resulting in a calculated annual average of 22,819 tonnes.

3.5.2 Findings

None

3.5.3. Conclusion

The calculation of GHG emissions and used data are according to applied methodology and its requirements. Further details to that conclusion are documented in annex 1 of that validation report.

3.6 Environmental Impacts

3.6.1 Discussion

The environmental impacts can be seen as being low. These low impacts have been sufficiently described in the PDD. The legislation does not require an EIA for this type of project.

Negative environmental effects are not expected to be created by the project. Given the nature of the project design this seems to be reasonable. Transboundary effects are not expected as the project site is far from the national boundary. As no significant environmental impacts are expected, such impacts have not influenced the project design.

3.6.2 Findings

None

3.6.3 Conclusion

The project does comply with the environmental requirements. A

3.7 Comments by Local Stakeholders

3.7.1 Discussion

A formal consultation process with local stakeholders has taken place and corresponding information has been submitted to the audit team. The stakeholders consulted included people from the local community and also the representatives of the local communities and the states. In addition neighbours to the site have been interviewed.

The stakeholders have been invited to meetings via post and electronic mail and which has also been published in local and regional newspapers.

The comments to the project design have been recorded and provided. As all comments have been positive, the project design has not been changed due to stakeholder comments.

3.7.2 Findings

None

3.7.3 Conclusion

The comments of the stakeholders were without exception positive. The project does comply with the requirements.

Further details to that conclusion are documented in annex 1 of that validation report.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

TÜV SÜD published the project documents on its website from **July 18 to August 16, 2006** and invited comments within 30 days, by Parties, stakeholders and non-governmental organizations.

Published:

http://www.netinform.de/KE/Wegweiser/Guide2.aspx?ID=1931&Ebene1_ID=26&Ebene2_ID=555&mode=1

During the commenting period there have been no comments received.

5 VALIDATION OPINION

The Certification Body ”Climate and Energy” has been ordered by AgCert International LLC, Ireland (AgCert International) to validate the project AWMS Methane Recovery Project BR06-S-29, São Paulo , Brazil.

By avoiding GHG emissions from open air lagoons, the project results in reductions of GHG emissions that are real, measurable and give long-term benefits to the mitigation of climate change. An analysis of the investment, technological and legal barriers demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions.

Additionally the assessment team reviewed the estimation of the projected emission reductions. TÜV SÜD confirms that the indicated amount of emission reductions of 228,194 tonnes CO_{2e} over a fixed crediting period of ten years, resulting in a calculated annual average of 22,819 tonnes CO_{2e} represents a reasonable estimation using the assumptions given by the project documents.

It is opinion of TÜV SÜD that the project as described in the final project design document issued on January 31, 2007 meets all relevant UNFCCC requirements for the CDM, set by the Kyoto Protocol, the Marrakech Accords and relevant guidance by the CDM Executive Board; furthermore that the project meets all relevant host country criteria and correctly applies the baseline and monitoring methodology “Type III, Other Project Activities, Category III.D., Methane Recovery for small-scale projects, version 11”.

Hence, TÜV SÜD will recommend the project for registration as CDM project activity by the CDM Executive Board.

The validation is based on the information made available to us and the engagement conditions detailed in this report. The validation has been performed using a risk based approach as described above. The only purpose of this report is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

Munich, 27.02.2007

Werner Betzenbichler

Head certification body
“climate and energy“

Munich, 27.02.2007

Markus Knödlseder

Project Manager

Annex 1: Validation Protocol

Industrie Service

Table 1 Project's Environment

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

REQUIREMENT	REFERENCE	Comment	CONCLUSION
6. Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for minimum 30 days, and the project design document and comments have been made publicly available	Marrakech Accords, CDM Modalities, §40	The global stakeholder process has taken place. There have been no comments received.	☑
7. The project design document shall be in conformance with the UNFCCC CDM-PDD format	Marrakech Accords, CDM Modalities, Appendix B, EB Decisions	The PDD is in conformance with the UNFCCC CDM-PDD format.	☑
8. The project participants shall submit a letter on the modalities of communication (MoC) before submitting a request for registration	EB-09 F_CDM_REG form	The letter on MoC will be submitted before submitting a request for registration. *Before submitting the project for registration the project owner has to provide an eligible Letter of Approval from involved Parties.*	**Open**

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Table 2 PDD

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
General Description of Project Activity					
A.1 Project Title					
A.1.1. Does the used project title clearly enable to identify the unique CDM activity?	2,4	DR,I	The project title is clearly enough to identify the unique CDM activity.	☑	☑
A.1.2. Are there an indication of a revision number and the date of the revision?	4	DR	Yes, there is an indication of a revision number and the date of the revision.	☑	☑
A.1.3. Is this in consistency with the time line of the project's history?	1,2, 4	DR, I	Yes, it is consistent.	☑	☑
A.2 Description of the project activity					
A.2.1 Is the description delivering a transparent overview of the project activities?	2,4	DR, I	The description is delivering a transparent over-view of the project activities.	☑	☑
A.2.2 Is all information provided in compliance with actual situation or planning?	2,4	DR,I	All information is provided in compliance with actual situation or planning.	☑	☑

CHECKLIST QUESTION		Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A.2.3	Are proofs available evidencing all information with relevance for the validity, for the determination of baseline and project emissions and for emission projections?	2,4	DR,I	The description of the project activity does not mention anything about project emissions which are calculated further on in the PDD. **Corrective Action Request 1:** It should be added in the description of the project activity that project emissions occur and a short description of what they are. **Corrective Action Request 2:** Information on stakeholder process and chronogram for implementation of biodigestors has to be uploaded on the extranet, or be submitted to the validation team	CAR 1 CAR 2	☑
A.2.4	Is all information provided in consistency with details provided by further chapters of the PDD?	4	DR	See A.2.3.	See CAR 1 CAR 2	☑
A.3 Project Participants						
A.3.1	Is the form required for the indication of project participants correctly applied?	4	DR	The form for the indication of project participants is correctly applied.	☑	☑
A.3.2	Is the voluntary participation of all listed entities or Parties confirmed by each of them?	1,2,4	DR,I	The signed contracts between AgCert and the farmers is the confirmation of the voluntary participation.	☑	☑
A.3.4	Is all information provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	4	DR	Yes. All provided information is in consistency.	☑	☑

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CHECKLIST QUESTION		Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A.4 Technical description of the project activity						
A.4.1	Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	2,4	DR, I	The physical location of the site isoverall correct.	☑	☑
A.4.2	Do the project participants possess ownership or licenses which will allow the implementation of the project at that site / those sites?	1,2, 4,17	DR, I	Yes. The project participant has concluded contracts with the sites allowing him the implementation of the project at the sites.	☑	☑
A.4.3	Is the category(ies) of the project activity correctly identified?	4	DR	The category is correctly identified.	☑	☑
A.4.4	Does the project design engineering reflect current good practices?	4	DR	Yes, the project design does reflect current good practice. The design has been professionally developed.	☑	☑
A.4.5	Does the description of the technology to be applied provide sufficient and transparent input to evaluate its impact on the greenhouse gas balance?	2,4,	DR, I	**Clarification Request 1:** The description of the technology to be applied provides a sufficient and transparent input to evaluate its impact on the greenhouse gas balance. However, it is not clear to the validation team whether the farm will use an enclosed flare as it is described in the PDD. The validation team asks for a technical description including a technical drawing of the flare, where it is mentioned that farms are equipped with an enclosed flare and not an open flare, and for an manufacturer evidence about the estimated efficiency.	CR 1	☑

CHECKLIST QUESTION		Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A.4.6	Is the brief explanation how the project will reduce greenhouse gas emission transparent and suitable?	4	DR	Yes, the brief explanation how the project will reduce greenhouse gas emission is transparent and suitable.	☑	☑
A.4.7	Is all information provided in compliance with actual situation or planning as available by the project participants?	1,2	DR, I	**Corrective Action Request 3:** Since the time of PDD preparation, the farm has undergone expansion. Recently built lagoons and barns should be updated in the PDD.	CAR 3	☑
A.4.8	Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	1,2, 4	DR, I	Yes, the project does apply state of the art equipment. **Clarification Request 2:** The number of biodigestor modules and its sizes should be mentioned in the PDD. See also requested information of CR 1	CR 2 See CR 1	☑
A.4.9	Is the project technology likely to be substituted by other or more efficient technologies within the project period?	1,2, 4	DR, I	No. The project equipment can be expected to run for the whole project period and it can not be expected that it will be replaced by more efficient technologies, but additional components could be added using biogas to generate heat and produce electricity	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A.4.10 Does the project requires extensive initial training and maintenance efforts in order to work as presumed during the project period?	1,2, 4,16	DR,I	Yes, initial training and maintenance efforts are required. During the visit at the project site the project developer and the farm owners confirmed that such training is envisaged. **Clarification Request 3:** The related documentation (signed participation list and/or date of the scheduled trainings) should be submitted to the validation team or to the TUV Support Documentation Panel.	CR 3	☑
A.4.11 Does the project make provisions for meeting training and maintenance needs?	1,2, 4,16	DR,I	See A.4.10.	See CR 3	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A.4.12 Is a schedule available on the implementation of the project and are there any risks for delays?	1,2, 4, 14, 19	DR,I	There is no schedule available for the commissioning of the biodigestors. AgCert has informed the validation team that the construction of the biodigestors will start in July 2007, which is after the beginning of the crediting period **Corrective Action Request 4:** The biodigester is schelduled to be 100% implemented by 30/03/07, but the crediting period starts in Feb 07. Please confirm that emissions reductions are adjusted for such mismatch. **Clarification Request 4:** Recently built lagoons (nr. 13 to 16) have a retention time below 21 days, as they were built to be temporary. However, given the schedule for commissioning of biodigestors, AgCert is requested to inform how retention time will be dealt with for those lagoons, before biodigestors become operational. It is also advisable to add into the PDD that those small lagoons are for temporary use until the biodigestors are in use.	CAR 4 CR 4	☑
A.4.13 Is the form required for the indication of projected emission reductions correctly applied?	4	DR	The form required for the indication of projected emission reductions is correctly applied.	☑	☑

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CHECKLIST QUESTION		Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A.5 Public Funding						
A.5.1	Is all information on public funding provided in compliance with actual situation or planning as available by the project participants?	1,2,4	DR,I	No public funding is involved in the project.	☑	☑
A.5.2	Is all information provided in consistency with details provided by further chapters of the PDD (in particular annex 2)?	4	DR	Yes. All information is consistent.	☑	☑
A.6. Bundling/Debundling						
A.6.1.	Is there all information provided which shows that the project activity is not a debundled component of a larger project activity?	4	DR	All information provided shows that the project activity is not a debundled component of a larger project activity. **Clarification Request 5:** AgCert should provide a general explanation to the validation team on how it will make sure that debundling will not take place over the time. AgCert should inform what monitoring measures are fulfilled to guarantee that no debundling from SSC projects to SSC projects occurs.	CR 5	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
B. .Baseline Methodology					
B.1. Choice and Applicability					
B.1.1. Is the baseline methodology previously approved by the CDM Methodology Panel?	4,10	DR	The baseline methodology III.D Methane Recovery/Version 9 for Small Scale Project Activities has been approved by the CDM Methodology Panel on May 12, 2006. **Corrective Action Request 5:** The project developer shall add the Version number to the title of the approved baseline methodology, in order to create a clear reference. Agcert shall switch to new approved methodology version 10, since the Brazilian DNA processes will take longer than the version 09 is valid.	CAR 5	☑
B.1.2. Is the choice of the methodology correctly justified by the PDD?	4,10	DR	The choice of the methodology is correctly justified by the PDD.	☑	☑
B.1.3. Is the baseline methodology the one deemed most applicable for this project?	2,4, 10	DR,I	The baseline methodology is the most applicable for this project. The project consists of a small-scale project, therefore and under consideration of all other aspects the chosen baseline methodology III.D. Methane Recovery is the most applicable for this project.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
B.1.4. Is the project in conformance with all applicability criteria of the applied methodology?	2,4, 10	DR,I	The project is in conformance with all applicability criteria of the applied methodology.	☑	☑
B.2. Application of the Baseline Methodology / Identification of the Baseline Scenario					
B.2.1. Is the application of the methodology and the discussion and determination of the chosen baseline transparent?	2,4, 10	DR,I	Yes. The application of the methodology is transparent.	☑	☑
B.2.2. Does the application consider all potential baseline scenarios in the discussion?	4,10	DR	Yes. The application considers all potential baseline scenarios in the discussion.	☑	☑
B.2.3. Is conservativeness addressed in the way of identifying the baseline?	4	DR	Conservativeness is addressed in all issues in the way of identifying the baseline.	☑	☑
B.2.4. Has the baseline been established on a project-specific basis?	1,2, 4	DR	The baseline has been established on a project-specific basis.	☑	☑
B.2.5. Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?	1,2, 4	DR, I	The baseline scenario does sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
B.2.6. Is the baseline determination compatible with the available data?	2,4	DR,I	Yes, data for baseline calculation matches historical data found on site. However, an expansion has occurred and today the number of animals is much bigger than by the time of PDD preparation. Given that the PDD data is more conservative than the current situation, no CAR needs to be requested. The Validation team would like to call the attention to the limit of CER 25 000 Tonnes / year for small scale project. With the planned expansion, the project may generate CERs above this limit, and those will not be credited to the project.	☑	☑
B.2.7. Does the selected baseline represent the most likely scenario among other possible and/or discussed scenarios?	4	DR	Yes. The selected baseline represents the most likely scenario.	☑	☑
B.2.8. Does the PDD follow the approach for identifying the baseline scenario as given by the approved methodology?	4	DR	Yes. The PDD follows the approach for identifying the baseline scenario as given by the approved methodology.	☑	☑
B.2.9. Is all literature and sources clearly referenced?	4	DR	Yes. All Literature and sources are clearly referenced.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
B.3. Additionality					
B.3.1. Is the discussion of how emission reductions are achieved by the project scenario in comparison to the identified baseline scenario provided in a transparent manner?	2,4	DR	Yes. The discussion of how emission reductions are achieved by the project scenario in comparison to the baseline scenario is provided in a transparent manner through a barrier analysis. The indicated barriers are plausible and could be partly verified on-site by the validation team.	☑	☑
B.3.2. In case of using calculation models in order to demonstrate emission reductions: Are all formulae and input data based on provable records?	4	DR,	For demonstrating the additionality no computer models have been applied	☑	☑
B.3.3. Does the PDD clearly demonstrate the additionality using the approach as given by the methodology?	4,10	DR	Yes. The PDD clearly demonstrate the additionality using the approach as given by the methodology.	☑	☑
B.3.4. In case of using the additionality tool: Are all steps followed in a transparent and provable manner?	--	--	Not relevant, because the additionality tool has not been used.	☑	☑
B.3.5. Does the discussion sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?	1,2, 4	DR,I	Yes. The discussion mentions some national and sectoral policies and macro-economic trends.	☑	☑
B.3.6. Does the CDM registration have any impact on the implementation of the project?	1,2, 4	DR	Without the CDM registration the project would not be implemented. The CDM registration plays a key role for the project.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
B.3.7. Is the approach for demonstrating additionality provided by the most recent (or still applicable) methodology correctly applied?	4,10	DR	The approach for demonstrating additionality is correctly applied by the most recent methodology.	☑	☑
B.3.8. Are other proofs than anecdotal evidence for all assumptions and statements used by the additionality discussion?	4	DR	According to common practise and experience of the validation team it seems to be obvious that the operation of open lagoon system is the baseline scenario and that the farmers will not switch to bio digesting without the investment from AgCert.	☑	☑
B.4. Project Boundary					
B.4.1. Are all emission related to the baseline scenario clearly identified and described in a complete manner?	2,4	DR,I	Yes. All emission related to the baseline scenario is clearly identified and described in a complete manner.	☑	☑
B.4.2. In case of grid connected electricity projects: Is the relevant grid correctly identified due to the EB guidance and the underlying methodology?	--	--	This question is not applicable to the project, as it is not a grid connected electricity project.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
B.4.3. Are all emission related to the project scenario clearly identified and described in a complete manner?	2,4	DR, I	Nothing said about project emissions which are mentioned in the PDD. **Clarification Request 6:** Within he project boundary it should mention the occurrence of project emissions and in those cases what project emissions, according to the methodology definition (CO2 emissions from use of fossil fuels or electricity for the operation of the facility), will occur after the implementation of the project activity and include them in the figure “B1 project boundary	CR 6	☑
B.4.4. Are all emission related to leakage clearly identified and described in a complete manner?	--	--	Not applicable as a leakage calculation is according to the methodology not required.	☑	☑
B.5. Detailed Baseline Information					
B.5.1. Is there any indication of a date when determine the baseline?	4	DR	It is not indicated in the PDD when the baseline was determined. **Clarification Request 7:** It has to be indicated in the PDD date of completion in *DD/MM/YYYY a*nd contact information and indicate whether the person/entity is also a project participant, as listed in Annex 1.	CR 7	☑
B.5.2. Is this in consistency with the time line of the PDD history?	4	DR	See B.5.1.	See CR 7	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
B.5.3. Is all data required provided in a complete manner by annex 3 of the PDD?	4	DR	The last updated PDD contains all necessary information in a complete manner.	☑	☑
B.5.4. Is all data given in compliance with the methodology?	4,10	DR	Yes. All data is in compliance with the methodology.	☑	☑
B.5.5. Is all data evidence by official data sources or replicable records?	4	DR	Yes. All data is evidenced by official data sources or replicable records.	☑	☑
B.5.6. Is the vintage of the baseline data correct?	2,4	DR,I	Even though if for almost each farm the population data is indicated for different months because of different dates of assessment by AgCert, the data vintage may be accepted by the validation team as for each farm the vintage of one year is guaranteed.	☑	☑
C. Duration of the Project / Crediting Period					
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	2,4	DR, I	The project´s starting date and operational lifetime are clearly defined and reasonable. However the commissioning of biodigestors is planned to be after the beginning of the crediting period. See CAR 4.	See CAR 4	☑
C.1.2. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	4	DR	Yes. The crediting period is clearly defined with a fixed crediting period of 10 years.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D. Monitoring Plan					
D.1. Monitoring Methodology					
D.1.1. Is the monitoring methodology previously approved by the CDM Methodology Panel?	4,11	DR	Yes. The monitoring methodology AMS III.D. (Version 10) "Methane Recovery" has been approved. Agcert shall switch to new approved methodology version 11, since the Brazilian DNA processes will take longer than the version 10 is valid.	☑	☑
D.1.2. Is the choice of the methodology correctly justified by the PDD?	4,11	DR	Yes. The choice of the methodology is correctly justified by the PDD.	☑	☑
D.1.3. Is the project in conformance with all applicability criteria of the applied methodology?	4,11	DR	The project is in conformance with all applicability criteria of the applied methodology.	☑	☑
D.1.4. Does the monitoring methodology provide a consistent approach in the context of all parameter to be monitored and further information provided by the PDD?	4,11	DR	Yes. The monitoring methodology provides a consistent approach in the context of all parameter to be monitored and further information provided by the PDD.	☑	☑
D.1.5. Does the monitoring methodology apply consistently the choice of the option selected for monitoring both of project and baseline emissions?	4,11	DR	The applied and approved methodology does not specify the monitoring of project emissions	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.2. Monitoring of Project Emissions (if applied)					
D.2.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the greenhouse gas emissions within the project boundary during the crediting period?	2,4,	DR, I	**Clarification Request 8** The monitoring of project emissions is not explicitly required according to applied methodology; however AgCert is requested to comment on how they would like to monitor potential project emissions in case they occur.	CR 8	☑
D.2.2. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the approved methodology applied?	2,4, 11	DR,I	The choices of project GHG indicators are reasonable. According to the methodology project emissions do not have to be monitored.	☑	☑
D.2.3. Will it be possible to determine the specified project GHG indicators?	2,4	DR,I	Yes. The necessary monitoring data and its accuracy will be guaranteed.	☑	☑
D.2.4. Will the indicators enable comparison of project data and performance over time?	2,4	DR,I	Yes. The indicators will enable comparison of project data and performance over time.	☑	☑
D.2.5. Is the information given for each monitoring variable by the presented table sufficient to ensure the verification of a proper implementation of the monitoring plan?	2,4	DR,I	Yes. The information is sufficient to ensure the verification of a proper implementation of the monitoring plan.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.2.6. Is the information given for each monitoring variable by the presented table sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	2,4,	DR,I	The given information is sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records.	☑	☑
D.2.7. Is the monitoring approach in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy?	2,4	DR,I	Yes. The monitoring approach is in line with current good practice.	☑	☑
D.2.8. Are all formulae used to determine project emission clearly indicated and in compliance with the monitoring methodology.	2,4	DR,I	Not all parameters used for the determination of project emissions are clearly described. Besides, it is not explained in the PDD by AgCert, what project emissions do include. However, according to the methodology project emissions do not have to be monitored and may be therefore not requested by the validation team.	☑	☑
D.3. Monitoring of Baseline Emissions (if applied)					
D.3.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the greenhouse gas emissions of the baseline emissions during the crediting period?	2,4	DR,I	All relevant data necessary for estimation or measuring the GHG emissions of the baseline emissions are given.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.3.2. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the approved methodology applied?	2,4	DR,I	Yes. The choices of project GHG indicators are reasonable and in conformance with the requirements set by the approved methodology.	☑	☑
D.3.3. Will it be possible to determine the specified project GHG indicators?	2,4	DR,I	Yes, according to given information the required parameters can be determined.	☑	☑
D.3.4. Is the information given for each monitoring variable by the presented table sufficient to ensure the verification of a proper implementation of the monitoring plan?	2,4	DR,I	Yes. The information is sufficient to ensure the verification of a proper implementation of the monitoring plan.	☑	☑
D.3.5. Is the information given for each monitoring variable by the presented table sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	2,4	DR,I	The given information is sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records.	☑	☑
D.3.6. Is the monitoring approach in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy?	2,4	DR,I	Yes. The monitoring approach is in line with current good practice.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.3.7. Are all formulae used to determine baseline emission clearly indicated and in compliance with the monitoring methodology.	2,4	DR,I	**Clarification Request 9:** Not all formulae and parameters used to determine baseline emission are clearly indicated: 1, The following abbreviations used in the Table E2 has to be explained in the PDD: - Days OB - BW kg - Cap EF 2. It shall be explained, how the emission factors for finisher (33,82) was calculated. Even if it is less than the calculated emission factor of 49,52 and hence more conservative, it should be made a note with a brief explaination. Those default values shall be noted in the PDD. 3. It should be explained how the information on genetics of the farm can be proper monitored in order to guarantee that it uses North American and/or European genetics. Any monitoring/verification that immediately identifies changes?	CR 9	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.4. Direct Monitoring of Emission Reductions (if applied)					
D.4.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring directly the greenhouse gas emissions reductions during the crediting period?	2,4	I,DR	All relevant data necessary for estimation or measuring the GHG emission reductions are provided.	☑	☑
D.4.2. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the approved methodology applied?	2,4	DR,I	Yes. The choices of project GHG indicators are reasonable and in conformance with the requirements set by the approved methodology.	☑	☑
D.4.3. Will it be possible to determine the specified project GHG indicators?	2,4	DR,I	Yes. It will be possible to determine the specified project GHG indicators.	☑	☑
D.4.4. Is the information given for each monitoring variable by the presented table sufficient to ensure the verification of a proper implementation of the monitoring plan?	2,4	DR,I	Yes. The information is sufficient to ensure the verification of a proper implementation of the monitoring plan.	☑	☑
D.4.5. Is the information given for each monitoring variable by the presented table sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	2,4	DR,I	The given information is sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.4.6. Is the monitoring approach in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy?	2,4	DR,I	Yes. The monitoring approach is in line with current good practice.	☑	☑
D.4.7. Are all formulae used to determine project emission reductions clearly indicated and in compliance with the monitoring methodology.	2,4	DR	See CR 9	See CR 9	☑
D.5. Monitoring of Leakage (if applicable)					
D.5.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring of leakage emissions during the crediting period?	--	--	Not applicable as the project activity does not require a leakage calculation according to the methodology.	☑	☑
D.5.2. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the approved methodology applied?	--	--	Not applicable.	☑	☑
D.5.3. Will it be possible to determine the specified project GHG indicators?	--	--	Not applicable.	☑	☑
D.5.4. Is the information given for each monitoring variable by the presented table sufficient to ensure the verification of a proper implementation of the monitoring plan?	--	--	Not applicable.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.5.5. Is the information given for each monitoring variable by the presented table sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	--	--	Not applicable.	☑	☑
D.5.6. Is the monitoring approach in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy?	--	--	Not applicable.	☑	☑
D.5.7. Are all formulae used to determine leakage emissions clearly indicated and in compliance with the monitoring methodology.	--	--	Not applicable.	☑	☑
D.6. Determination of Emission Reductions					
D.6.1. Are all formulae used to determine leakage emissions clearly indicated and in compliance with the monitoring methodology.	--	--	Not applicable.	☑	☑
D.6.2. Is the information given for each calculated variable sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	2,4	DR,I	The given information is sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.7. Quality Control (QC) and Quality Assurance (QA) Procedures					
D.7.1. Is the selection of data undergoing quality control and quality assurance procedures complete?	4	DR	The selection of data is complete.	☑	☑
D.7.2. Is the belonging determination of uncertainty levels done correctly for each ID in a correct and reliable manner?	4	DR	Uncertainty levels for each ID are not determined, **Clarification Request 10:** Table E6 of the PDD shows the uncertainty parameters. However, it is not determined the uncertainty level for each ID. AgCert should add this information.	CR 10	☑
D.7.3. Are quality control procedures and quality assurance procedures sufficiently described to ensure the delivery of high quality data?	4	DR	The control procedures and quality assurance procedures are sufficiently described in most cases. See CR 9 on monitoring of Genetics	See CR 9	☑
D.7.4. Is it ensured that data will be bound to national or internal reference standards?	4	DR	Yes. That data will be bound to national reference standards.	☑	☑
D.8. Operational and management structure					
D.8.1. Is the authority and responsibility of project management clearly described?	2,4	DR,I	The authority and responsibility of project management is clearly described.	☑	☑
D.8.2. Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	2,4	DR,I	The authority and responsibility for registration, monitoring, measurement and reporting is clearly described.	☑	☑

4

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.8.3. Are procedures identified for training of monitoring personnel?	2,4, 12	DR,I	Yes. Corresponding documents have been submitted to the validation team.	☑	☑
D.8.4. Are procedures identified for emergency preparedness for cases where emergencies can cause unintended emissions?	2,4	DR,I	Yes. Corresponding documents have been submitted to the validation team.	☑	☑
D.8.5. Is the monitoring plan developed in a project specific manner clearly addressing the unique features of the CDM activity?	--	--	According to SSC-guidance there is no need for an Annex 4 and a monitoring plan. Hence, all questions regarding the monitoring plan are not relevant.	☑	☑
D.8.6. Does the monitoring plan completely describes all measures to be implemented for monitoring all parameter required?	--	--	Not relevant.	☑	☑
D.8.7. Does the monitoring plan completely describes all measures to be implemented for ensuring data quality of all parameter to be monitored?	--	--	Not relevant.	☑	☑
D.8.8. Does the monitoring plan provide information on monitoring equipment and respective positioning in order to safeguard a proper installation?	--	--	.Not relevant.	☑	☑
D.8.9. Are procedures identified for calibration of monitoring equipment?	--	--	**Clarification Request 11** AgCert shall explain what monitoring measures will be taken in order to guarantee sealed and fully calibrated flow meters after commissioning.	CR 11	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.8.10. Are procedures identified for maintenance of monitoring equipment and installations?	14	DR	Yes. The document “Especificação do Método” submitted to the validation team, describes such procedures in chapter 4.0.	☑	☑
D.8.11. Are procedures identified for monitoring, measurements and reporting?	14	DR	The processes for “Collecting” and “Handling” of data are described in the O &M Plan. Including QA/QC measures. Besides, the document “Especificação do Método” submitted to the validation team, describes such procedures in chapter 6.0 and 7.0.	☑	☑
D.8.12. Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)	14	DR	Yes. The document “Especificação do Método” submitted to the validation team, describes such procedures in chapter 6.0.	☑	☑
D.8.13. Are procedures identified for dealing with possible monitoring data adjustments and uncertainties?	14	DR	Yes. The document “Especificação do Método” submitted to the validation team, describes such procedures in chapter 4.2 and 4.3.	☑	☑
D.8.14. Does the monitoring plan provide procedures identified for troubleshooting allowing redundant reconstruction of data in case of monitoring problems?	14,4	DR	The procedures for Emergency Maintenance notification are described in 4.3.1 of the O&M Plan. “Alternative Operating Procedures” designed to prevent unintended emissions are found in 4.2.2.7, 4.2.3.6, 4.2.4.5, and 4.2.5.5 of the O&M Plan. Besides, the document “Especificação do Método” submitted to the validation team, describes such procedures in chapter 4.2 and 4.3.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.8.15. Are procedures identified for review of reported results/data?	--	DR	Yes. Procedures are identified for review of reported results/data.	☑	☑
D.8.16. Are procedures identified for internal audits of GHG project compliance with operational requirements where applicable?	--	DR	Yes. See document I020-2, QA Process-Product Audits from 11/05/03.	☑	☑
D.8.17. Are procedures identified for project performance reviews before data is submitted for verification, internally or externally?	--	DR	Yes. See document P025, Control of Measuring & Monitoring Devices (MMD) and document I031-5 Receiving Inspection from 19.02.04.	☑	☑
D.8.18. Are procedures identified for corrective actions in order to provide for more accurate future monitoring and reporting?	--	DR	Yes. See document I005-1, Corrective and Preventive Actions from 21.07.03.	☑	☑
E. Calculation of GHG Emissions by Source					
E.1. Predicted Project GHG Emissions					
E.1.1. Are all aspects related to direct and indirect GHG emissions captured in the project design?	1,2, 4	DR,I	Not all aspects related to direct and indirect GHG emissions are captured in the project design.	See CR 8	☑
E.1.2. Are the GHG calculations documented in a complete and transparent manner?	4	DR	Not all GHG calculations are documented in a complete and transparent manner.	See CR 8	☑
E.1.3. Have conservative assumptions been used to calculate project GHG emissions?	4	DR	Conservative assumptions have been applied.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
E.1.4. Are uncertainties in the GHG emissions estimates properly addressed in the documentation?	2, 4, 10		According to the methodology.	☑	☑
E.1.5. Is the projection based on same procedures as used for later monitoring or acceptable alternative models?	-	-	There is no need for any projection.	☑	☑
E.1.6. Is the projection based on provable input parameter?	-	-	There is no need for any projection.	☑	☑
E.2. Leakage					
E.2.1. Are potential leakage effects beyond the chosen project boundaries properly identified?	--	--	Not applicable as methodology does not require the calculation of leakage.	☑	☑
E.2.2. Have these leakage effects been properly accounted for in calculations?	--	--	N/A. See E.2.1.	☑	☑
E.2.3. Have conservative assumptions been used to calculate leakage emissions?	--	--	N/A. See E.2.1.	☑	☑
E.2.4. Are uncertainties in the leakage estimates properly addressed in the documentation?	--	--	N/A. See E.2.1.	☑	☑
E.2.5. Is the projection based on same procedures as used for later monitoring or acceptable alternative models?	--	--	N/A. See E.2.1.	☑	☑
E.2.6. Is the projection based on provable input parameter?	--	--	N/A. See E.2.1.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
E.3. Baseline Emissions					
E.3.1. Have the most relevant and likely operational characteristics and baseline indicators been chosen as reference for baseline emissions?	2,4, 10	DR,I	Yes. The most relevant and likely operational characteristics and baseline indicators have been chosen as reference for baseline emissions.	☑	☑
E.3.2. Are the baseline boundaries clearly defined and do they sufficiently cover sources and sinks for baseline emissions?	2,4	DR,I	Both the baseline boundary for emissions and the spatial boundary are clearly defined.	☑	☑
E.3.3. Are the GHG calculations documented in a complete and transparent manner?	2,4	DR,I	Not all GHG calculations are documented in a complete and transparent manner.	See CR 8	☑
E.3.4. Have conservative assumptions been used when calculating baseline emissions?	4	DR	Conservative assumptions have been used when calculating baseline emissions.	☑	☑
E.3.5. Are uncertainties in the GHG emission estimates properly addressed in the documentation?	4	DR,I	According to the methodology.	☑	☑
E.3.6. Is the projection based on same procedures as used for later monitoring or acceptable alternative models?	--	--	Projection is made regarding the expansion of capacity production at the farm. Expected amount of animals is clearly stated in the PDD and correctly applied according to the methodology.	☑	☑
E.3.7. Is the projection based on provable input parameter?	2,4	DR,I	There is no need for any projection.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
E.4. Emission Reductions					
E.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	2,4	DR,I	Yes. The project will result in fewer GHG emissions than the baseline scenario.	☑	☑
E.4.2. Is the form/table required for the indication of projected emission reductions correctly applied?	4	DR	Yes. The form required for the indication of projected emission reductions is correctly applied.	☑	☑
E.4.3. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	2,4, 14	DR,I	No. Crediting period will start on 1/12/06 And biodigestors are ready July 07. See CAR 4	See CAR 4	☑
F. Environmental Impacts					
F.1.1. Has an analysis of the environmental impacts of the project activity been sufficiently described?	2,4	DR,I	Yes. The environmental impacts of the project activity have been sufficiently described.	☑	☑
F.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	2,4	DR,I	An EIA is not necessary.	☑	☑
F.1.3. Will the project create any adverse environmental effects?	2,4	DR,I	No. The project will not create any adverse environmental effects.	☑	☑
F.1.4. Are transboundary environmental impacts considered in the analysis?	2,4	DR,I	Positive transboundary environmental impacts are expected, due to the new equipment and the need for regular monitoring accidents can be identified easier.	☑	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
F.1.5. Have identified environmental impacts been addressed in the project design?	2,4	DR,I	Identified environmental impacts have been addressed in the project design.	☑	☑
F.1.6. Does the project comply with environmental legislation in the host country?	2,4	DR,I	The project complies with the environmental legislation in the host country.	☑	☑
G. Stakeholder Comments					
G.1.1. Have relevant stakeholders been consulted?	2,3, 4,18	DR,I	See CAR 2	See CAR 2	☑
G.1.2. Have appropriate media been used to invite comments by local stakeholders?	2,4, 18	DR,I	See CAR 2	See CAR 2	☑
G.1.3. If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	-	DR,I	The Brazilian DNA gives guidance how the local stakeholder process has to be conducted. CAR 2 above is also applicable to this item	See CAR 2	☑
G.1.4. Is the undertaken stakeholder process described in a complete and transparent manner?	-	DR,I	See CAR 2	See CAR 2	☑

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
G.1.5. Is a summary of the stakeholder comments received provided?	2,4	DR,I	See CAR 2	See CAR 2	☑
G.1.6. Has due account been taken of any stakeholder comments received?	2,4	DR, I	See CAR 2	CAR 2	☑

Table 3 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to check-list question in tables 1 and 2	Summary of project owner response	Validation team conclusion
Corrective Action Request 1: It should be added in the description of the project activity that project emissions occur and a short description of what they are.	Table 2, A.2.3.	**CAR1 -** Section A.2 of the PDD describes emissions of VOC's.	Accepted
Corrective Action Request 2: Information on stakeholder process and chronogram for implementation of biodigestors has to be uploaded on the extranet, or be submitted to the validation team	C 1.2	**CAR2 -** Requested information has been posted to the PDD supporting documents portal. **See SHM (BR-PS-SP-03-29-2005)** chronogram for implementation 15/11/06 Start 01/01/07 25% 01/02/07 50% 01/03/07 80% 15/03/07 90% 30/03/07 100% Training: 1st. week of April	Accepted.

Draft report clarifications and corrective action requests by validation team	Ref. to check-list question in tables 1 and 2	Summary of project owner response	Validation team conclusion
Corrective Action Request 3: Since the time of PDD preparation, the farm has undergone expansion. Recently built lagoons and barns should be updated in the PDD. Section 4.1.4, pag. 6: description of farm S. Domingos should inform a capacity of 19,000 instead of 'over 17,000'.	A.4.7	**CAR3 –** The PDD has been updated to reflect the farm expansion. The capacity in PDD has been updated.	Accepted.
Corrective Action Request 4: The biodigester is scheduled to be 100% implemented by 30/03/07, but the crediting period starts in Feb 07. Please confirm that emissions reductions are adjusted for such mismatch.	A.4.12	**CAR4 –**The Project's crediting period starting date has been changed to June 1, **2007** therefore, no adjustment is required.	Accepted
Corrective Action Request 5: The project developer shall add the Version number to the title of the approved baseline methodology, in order to create a clear reference. Agcert shall switch to new approved methodology version 11, since the Brazilian DNA processes will take longer than the version 09 is valid.	B.1.1	**CAR5 –** V.11 of the Methodology has been submitted for review.	Accepted

Draft report clarifications and corrective action requests by validation team	Ref. to check-list question in tables 1 and 2	Summary of project owner response	Validation team conclusion
Clarification Request 1: The description of the technology to be applied provides a sufficient and transparent input to evaluate its impact on the greenhouse gas balance. However, it is not clear to the validation team whether the farm will use an enclosed flare as it is described in the PDD. The validation team asks for a technical description including a technical drawing of the flare, where it is mentioned that farms are equipped with an enclosed flare and not an open flare, and for an manufacturer evidence about the estimated efficiency.	E.1.5	**CR1 –** An updated drawing of the enclosed flare has been posted to the PDD supporting documents portal. Please see Plano I Ground Level Flare in the “Components/Users Manuals” section.	Drawings will be accepted for Validation. However, for verification the flare efficiency has to be provided, and AgCert has to be aware that in case flare efficiency is lower than that of a typical enclosed flare (99%), volumes of CERs will be lost.
Clarification Request 2: The number of biodigestor modules and its size should be mentioned in the PDD.	E.1.8	**CR2 –** The PDD clearly states digesters shall be sized sufficiently per project.	Accepted

<table>
<tr><th>Draft report clarifications and corrective action requests by validation team</th><th>Ref. to check-list question in tables 1 and 2</th><th>Summary of project owner response</th><th>Validation team conclusion</th></tr>
<tr><td>Clarification Request 3:
The related documentation (signed participation list and/or date of the scheduled trainings) should be submitted to the validation team or to the TUV Support Documentation Panel.</td><td>E.1.10</td><td>CR3 - Construction hasn't started yet. Training documentation will be available as soon as construction is over.
Proposed schedule:<table><tr><td>15/11/06</td><td>Start</td></tr><tr><td>01/01/07</td><td>25%</td></tr><tr><td>01/02/07</td><td>50%</td></tr><tr><td>01/03/07</td><td>80%</td></tr><tr><td>15/03/07</td><td>90%</td></tr><tr><td>30/03/07</td><td>100%</td></tr><tr><td>Training: 1st. week of April</td><td></td></tr></table></td><td>Accepted</td></tr>
<tr><td>Clarification Request 4:
Recently built lagoons (nr. 13 to 16) have a retention time below 21 days, as they were built to be temporary. However, given the schedule for commissioning of biodigestors, AgCert is requested to inform how retention time will be dealt with for those lagoons, before biodigestors become operational. It is also advisable to add into the PDD that those small lagoons are for temporary use until the biodigestors are in use.</td><td>E.1.12</td><td>CR4 - If you divide the cost of the recently built lagoons (R$ 25,000) by their total volume you will get the cost per m3. With the cost per m3 you can easily get to the cost of lagoons for 30 HRT which would be business as usual. The 8 new lagoons have a volume of roughly 960 m3 built at a cost of approximately R$26.00 per m3; at this price the farmer would have to spend R$140,000 to build 30 HRT lagoons for the expansion (not considering that the larger the lagoons are the lower is the cost per m3 because it dilutes the machines mobilization cost). The digester AgCert is building at Fazenda São Domingos will cost R$ 1,100,000.00 Therefore the biodigester is more expensive than business as usual.</td><td>Accepted.</td></tr>
</table>

Draft report clarifications and corrective action requests by validation team	Ref. to check-list question in tables 1 and 2	Summary of project owner response	Validation team conclusion
Clarification Request 5: AgCert should provide a general explanation to the validation team on how it will make sure that debundling will not take place over the time. AgCert should inform what monitoring measures are fulfilled to guarantee that no debundling from SSC projects to SSC projects occurs.	A.6.1	**CR5 –** All projects are plotted using "Google Earth" to ensure locations are not creating a de-bundling issue. Precise GPS coordinates have been included in the PDD. These distances will be considered if at some time in the future AgCert is to build additional digester(s).	Accepted
Clarification Request 6: Within the project boundary it should be mentioned the occurrence of project emissions and in those cases what project emissions, according to the methodology definition (CO2 emissions from use of fossil fuels or electricity for the operation of the facility), will occur after the implementation of the project activity ,and include them in the figure "B1 project boundary	Table 2, B.4.3.	**CR6 –** Direct project emissions are addressed in the PDD.	Accepted
Clarification Request 7: It has to be indicated in the PDD date of completion in *DD/MM/YYYY a*nd contact information and indicate whether the person/entity is also a project participant, as listed in Annex 1.	Table 2,B.5.1.	**CR7 –** This information is included in the PDD.	Accepted

Draft report clarifications and corrective action requests by validation team	Ref. to check-list question in tables 1 and 2	Summary of project owner response	Validation team conclusion
Clarification Request 8: The monitoring of project emissions is not explicitly required according to applied methodology; however AgCert is requested to comment on how they would like to monitor potential project emissions in case they occur.	Table 2, D.2.1.	**CR8 –** V.11 of the methodology requires inclusion of considering direct project activities emissions to include CO2 emissions from use of fossil fuels and other potential project emissions. The methodology does not require monitoring of potential project emissions; however AgCert has standard operating practices that include operational and visual checks that would indicate any additional project emissions in case they occur.	Accepted

Draft report clarifications and corrective action requests by validation team	Ref. to check-list question in tables 1 and 2	Summary of project owner response	Validation team conclusion
Clarification Request 9: Not all formulae and parameters used to determine baseline emission are clearly indicated: 1,The following abbreviations used in the Table E2 has to be explained in the PDD: - Days OB - BW kg - Cap EF 2, It shall be explained, how the emission factors for finisher (33,82) and nursery (7,85) were calculated. Even if it is less than the calculated emission factor of 49,52 and hence more conservative, it should be made a note with a brief explaination. Those default values shall be noted in the PDD. 3. It should be explained how the information on genetics of the farm can be proper monitored in order to guarantee that it uses North American and/or European genetics. Any monitoring/verification that immediately identifies changes?	Table 2, D.3.7.	**CR9 –** Requested abbreviations have been included in the PDD. Factors are weight adjusted based on animal weights. Since these animals are smaller, they produce less manure thus the EF is smaller. As has been previously discussed, pork producers cannot sustain a profitable business without the use of North American and/or European genetic stock.	Accepted.

Draft report clarifications and corrective action requests by validation team	Ref. to check-list question in tables 1 and 2	Summary of project owner response	Validation team conclusion
Clarification Request:10: Table E6 of the PDD shows the uncertainty parameters. However, it is not determined the uncertainty level for each ID. AgCert should add this information.	Table 2, D.7.2	**CR10 –** Uncertainty factors are addressed in the Monitoring Plan.	Accepted
Clarification Request 11: AgCert shall explain what monitoring measures will be taken in order to guarantee sealed and fully calibrated flow meters after commissioning.	Table 2, D.7.3	**CR11 -** Flow meters are supplied by the manufacturer calibrated and sealed. They are supplied with a certificate of calibration.	Response is accepted for validation. However a certificate of calibration and seal will need to be presented to the auditors for the verification phase.

Annex 2: Information Reference List

Reference No.	Document or Type of Information
1	On-site interview at the offices of Agcert in São Paulo with the project developer conducted on June 16, 2006 by auditing team of TÜV SÜD **Validation team on-site:** Sandro T. Marostica TÜV SÜD Industrie Service GmbH **Interviewed persons:** Miguel Gastão Agcert David Lawrence Agcert
2	On-site interview in August 06 by auditing team of TÜV SÜD **Validation team on-site:** Sandro T. Marostica TÜV SÜD Industrie Service GmbH **Interviewed persons:** Alessandro José de Moraes – Manager Fazenda S. Domingos Thomas Jefferson Cardoso - AgCert
3	Newspaper Published Invitation for Stakeholder meeting available on AgCert portal
4	Project Design Document, version 1 from July 2006, submitted August 06
5	UNFCCC homepage http://www.unfccc.int
6	Interim Measures for Operation and Management of Clean Development Mechanism Projects, NDRC, June 2004
7	Operation/Environmental Licenses
8	http://www.ambientebrasil.com.br
9	http://www.gaemg.org.br

Reference No.	Document or Type of Information
10	Approved baseline methodology Type III, Other Project activities, Category III.D Methane recovery
11	Approved monitoring methodology Type III, Other Project activities, Category III.D Methane recovery
12	Form MS 004 – Flare monitoring
13	Carbon Contracts with the farm, pdf-files on TUV Support Documentation Portal,
14	Monitoring Documentation “Especificacao do Metodo”, submitted in October 2005.
15	Validation and Verification Manual, IETA/World Bank (PCF), http://www.vvmanual.info
16	Training schedule of Faz. S. Domingos
17	Certificate of farm Ownership
18	AgCert Support Documentation Portal
19	Declaration Letter by Mr. Olinto Rodrigues de Arruda on farm expansion and the construction of new temporary lagoons
20	Final PDD, DOCUMENT ID: BR06-S-29, VER 5, 31 JAN 2007