

VERIFICATION REPORT

ADPML Portel -Para REDD Project Monitoring Period for the 2009-2011 Period - BRAZIL



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Summary:

DNV (U.S.A.) Inc. (DNV GL) has performed the verification of the emission reductions reported for the “ADPML Portel-Para REDD Project.” for the period 1 January 2009 to 1 January 2012, to review and determine the monitored reductions in GHG emissions that have occurred as a result of the project activity.

The verification was performed on the basis of VCSA Programme Guidelines & Standard version 3.2 for the VCS projects, as well as criteria given to provide for consistent project operations, monitoring and reporting. The verification was conducted by means of document review, follow-up interviews and site inspection, and the resolution of outstanding issues.

In our opinion, the GHG emission reductions reported for the project in the monitoring report version 1.5 of 9 November 2014 are fairly stated. The GHG emission reductions were calculated correctly on the basis of approved methodology VM0015 (Version 1.1) and the monitoring plan contained in the VCS PD of 9 November 2014.

Hence, DNV (USA) Inc. (DNV GL) is able to certify that the net anthropogenic GHG emission reductions and removals (i.e. net GHG benefits) from the “ADPML Portel-Para REDD Project” during the period amount to 550 391 tCO₂e. DNV (USA) Inc. verified that the non-permanence risk rating of the proposed project activity for this verification is 13.75 % which is to be applied to the change in carbon stocks at this verification (i.e. equal to 72 780 tCO₂e). The amount of VCUs to be issued would be 477 611 tCO₂e.

DNV GL does not assume any responsibility towards the issuance and utilization of the VCUs hereby verified and certified. Request for issuance of VCUs shall be made by the project proponent to an approved VCS Program Registry based on the requirements set out under the most recent version of the VCS Program Guidelines clause on VCS Registration.

The verification of reported emission reductions is based on the information made available to DNV GL and the engagement conditions detailed in this report. DNV GL cannot be held liable by any party for decisions made or not made based on this report.

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1 INTRODUCTION

1.1 Objective

Ecosystem Services LLC has commissioned DNV (USA) Inc. (DNV GL) to carry out the verification and certification of removals and emission reductions reported for the “*ADPML Portel-Para REDD Project*” (the project) in the period *1 January 2009 to 1 January 2012*. This report contains the findings from the verification and includes a verification statement for the verified carbon units.

Verification is the periodic independent review and ex-post determination by an accredited Verification Body (VB) of the monitored emissions by sources and removals by sinks that have occurred as a result of the registered CDM project activity during a defined verification period.

A verification statement is the written assurance by a VB that, based on the work done according to the VCS Standard, during a specific period in time, a project activity achieved the net anthropogenic GHG emissions or removals as verified.

The objective of this verification was to verify the net anthropogenic GHG emissions and removals reported for the “*ADPML Portel-Para REDD Project*” for the period *1 January 2009 to 1 January 2012*.

1.2 Scope and Criteria

The scope of the verification is:

- To verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan.
- To evaluate the GHG removals and GHG emissions data and express a conclusion with a reasonable level of assurance about whether the reported GHG removals and GHG emissions data is free from material misstatement.
- To verify that reported GHG removals and GHG emissions data is sufficiently supported by evidence.

The verification shall ensure that reported net anthropogenic GHG emissions and removals are complete and accurate in order to be certified.

The criteria of the verification are:

- The approved VCS methodology VM0015 Version 1.1 /13/;
- VCS Standard version 3.3 and other relevant requirements defined by VCSA /14/;
- VCS AFOLU Requirements version 3.3 /17/;
- VCS Program Definitions: VCS Version 3.4 /16/.

The verification shall ensure that reported emission reductions or removals are complete and accurate in order to be verified.

1.3 Level of Assurance

The verification report expresses a conclusion with a reasonable level of assurance about whether the reported net anthropogenic GHG emissions or removals data is free from material misstatement. DNV GL applied a materiality threshold of 1% with respect to omission or misstatements concerning reported quantities as per VCS standard.

1.4 Summary Description of the Project

Project Proponents (Parties):	Avoided Deforestation Project (Manaus) Limited ("ADPML") 18-20 Le Pollet, St Peter Port, Guernsey GY1 1WH
Title of project activity:	<i>ADPML Portel-Para REDD Project</i>
Baseline and monitoring methodology	VM0015 Version 1.1
Location of the project activity	The project is located in the Portel municipality, located in the Portel micro region (Brazil)
Project's crediting period:	1 January 2009 to 31 December 2049
Period verified in this verification:	<i>1 January 2009 to 1 January 2012</i>

2 VERIFICATION PROCESS

2.1 Method and Criteria

The verification was performed through means of the following three phases in accordance with the requirement of the registered VCS PD/2/, the applied methodology/13/, and VCS Version 3.3 /14/ and other relevant VCS requirements.

- A desk review of the monitoring report and all support documents.
- Follow-up interviews with project stakeholders and site inspection.
- The resolution of outstanding issues and the issuance of the verification report and statement.

The following sections outline each step in more detail.

The verification of the net GHG emissions or removals has assessed all factors and issues that constitute the basis for GHG removals and emissions from the project. These include:

- Review of the monitoring report, the non-permanence risk assessment and other relevant documentation /11/ - /12/;
- Forest inventory field data sheets, forest inventory calculation spread sheet, leakage calculation spread sheet and net GHG emission reductions spread sheet /3/ - /9/; and
- Legal land tenure & user rights /10/.

Verification team

The verification team is in accordance with the requirements of the ANSI accreditation:

Role	Last Name	First Name	Country	Type of involvement					
				Desk review	Site visit / Interviews	Reporting	Supervision of work	Technical review	TA 1.14 competence
Team leader (Verifier) (from 1 December 2013)	Aalders	Edwin	Norway	✓		✓	✓		✓
Team Leader Verifier (till 1 December 2013)	Holland	Kyle	USA	✓	✓				✓
Verifier	Barbane	Zachary	USA						
Technical reviewer	Kapambwe	C Misheck	Australia					✓	✓
Technical reviewer (responses to VCS findings)	Reed	Pablo	USA					✓	✓

Duration of verification

Preparations:	From 13 July 2013 to 20 July 2013
On-site verification:	From 20 July 2013 to 28 May 2013
Reporting, calculation checks and QA/QC:	From 28 May 2013 to 15 March 2014

2.2 Document Review

The monitoring report version 1.5 of 9 November 2014 /1/, the non-permanence risk assessment /3/, forest inventory field data sheets /9/, forest inventory calculation spread sheet /7/, leakage calculation spread sheet /9/, as well as the GIS system and its maps, were assessed as part of the verification.

In addition, the validated VCS PD (in particular the baseline estimations and the monitoring plan contained in the VCS PD) /2/, the final validation report of the registered VCS PD /21/, and the applicable approved methodology VM0015 Version 1.1 /13/ were checked.

Documents provided by the Project Participants that relate directly to the GHG components of the project. These have been used as direct sources of evidence for the periodic verification conclusions, and are usually further checked through interviews with key personnel.

- /1/ Giancarlo Raschio: *VCS Monitoring Report (MR) for project activity "ADPML Portel -Para REDD Project Monitoring Period for the 2009-2011 Period" in Brazil*, version 1.1 dated 28 June 2013, version 1.4 dated 6 September 2013 reviewed during the desk review and version 1.5 dated 9 November 2014 verified by DNV GL.
- /2/ Ecosystem Services LLC: *PD for project activity "ADPML Portel-Para REDD Project" in Brazil*, version 5 dated 17 January 2013 and version 6 dated 9 November 2014
- /3/ Ecosystem Services LLC: *Non-permanence risk report: VCS version 3 – "ADPML Portel-Para REDD Project" version 1.0*, 19 July 2013
- /4/ Ecosystem Services LLC: *Tables RMDLT_Verification 2013.xlsx and ADPML_Verification 2013.xlsx*
- /5/ Ecosystem Services LLC: *Tables ADPML_final two classes_no moisture_1st verification.xlsx*,
- /6/ Ecosystem Services LLC: *Tables ADPML_two classes_no moisture_40yr.xlsx*
- /7/ Ecosystem Services LLC: *Spread sheet with the Calculation of land cover areas for ADPML and RMDLT, (Baseline Deforestation 2011_Two forest classes.xlsx)*, 28 August 2013
- /8/ Ecosystem Services LLC: *Spread sheets with carbon pool calculations (Carbon results_Overmann 1994_Two forest classes.xls)*. Carbon results_Overmann 1994_Two forest classes_CORRECTED without moisture.xls)
- /9/ Ecosystem Services LLC: *ADPML_Degradation_Verification 2013.xlsx and RMDLT_Degradation_Verification 2013.xlsx*
- /10/ Furriel A Advogados: *Legal Opinion (10 September 2010 & Addendum Legal Opinion (28 February 2014) on Register Certificates of Ownership*
- /11/ Registro de Imoveis: *Certified copies of proof of Ownership*
- /12/ Ecosystem Services LLC: *Patrolling activities 2013.xls*

Background documents related to the design and/or methodologies employed in the design or other reference documents.

- /13/ Amazonas Sustainable Foundation, BioCarbon Fund, Carbon Decisions International, Institute for the Conservation and Sustainable Development of Amazona: *Approved VCS Methodology VM0015 'Methodology for Avoided Unplanned Deforestation'*, Version 1.1, 3 December 2012

- /14/ VCSA: *VCS standards: VCS Version 3.3*, 4 October 2012
- /15/ VCSA: *AFOLU Non-Permanence Risk tool: VCS Version 3.1*, 1 February 2012
- /16/ VCSA: *Program Definitions: VCS Version 3.4*, 4 October 2012
- /17/ VCSA: *AFOLU requirements: VCS Version 3.3*, 4 October 2012
- /18/ VCSA: *AFOLU requirements: VCS Monitoring Report Template 3.2*, 4 October 2012
- /19/ ISO 14064-3:2006: *Greenhouse gases — Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions*, First edition, 1 March 2006
- /20/ ISO 14065:2007: *Greenhouse gases — Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognitions*, First edition, 15 April 2007
- /21/ DET NORSKE VERITAS (U.S.A.). INC.: *VCS validation report – ADPML Portel-Para REDD Project*, Report N° 2013-9073 Revision 01, 15 February 2013
- /22/ UNFCCC: *CDM projects database showing registered projects and projects under validation*, accessed on 02 Feb 2014
<http://cdm.unfccc.int/Projects/projsearch.html>
<http://cdm.unfccc.int/Projects/Validation/index.html>
- /23/ IPCC, 2003: *Good Practice Guidance for Land Use, Land-Use Change and Forestry*, prepared by the National Greenhouse Gas Inventories Programme, Jim Penman, Michael Gytarsky, Taka Hiraishi, Thelma Krug, Dina Kruger, Riitta Pipatti, Leandro Buendia, Kyoko Miwa, Todd Ngara (eds). Published: IGES, Japan. URL:
<http://www.ipcc-nggip.iges.or.jp/public/gpoglulucf/gpoglulucf.html>
- /24/ Lai Cunha de Oliveira: *Efeito da exploração da madeira e de diferentes intensidades de desbastes sobre a dinâmica da vegetação de uma área de 136 ha na floresta nacional do Tapajós*. February 2005
- /25/ Adalberto Verissimo, Paulo Barreto, Marli Mattos, Ricardo Tarifa and Christopher Uhl: *Logging impact and perspectives for sustainable forest management in old Amazonian frontier: the case of Paragominas, Forest Ecology and Management*, 55 (1992) 169-199
- /26/ Andre Luiz Silva Monteiro, Carlos Moreira de Souza Jr. Paulo Goncalves Barreto, Frank Leone de Sousa Pantoja, Jeffery John Gerwing: *Impact of logging on fire on Transitional Tropical Forest in the southeastern Brazilian Amazon*, Scientia Forestalis n65, p11-21, June 2004
- /27/ Gregory P. Asner, Micheal Keller, Marco Lentini, Frank Merry, and Carlos Souza Jr: *Extracao Selectiva de Madeira e Sua Relacao com Desmatamento, Amazonia and Global Change Geophysical Monograph Series 186*, 2009
- /28/ Araujo, T. M., N. Higuchi, et al. (1999). "Comparison of formulae for biomass content determination in a tropical rain forest site in the state of Pará, Brazil." *Forest Ecology and Management*.

2.3 Interviews

In the period from 20 to 28 July 2013 DNV GL conducted various interviews at the Ecosystem Services LLC office in Belem. The list of interviewed persons is detailed below.

/29/	Gonzalo Castro de la Mata	Ecosystem Services	20-28 July 2013
/30/	Raniery Branco	Ecosystem Services	20-28 July 2013
/31/	Livia Teixeira	Ecosystem Services	20-28 July 2013
/32/	Narceki Galdubi	Ecosystem Services	20-28 July 2013
/33/	Zenildo Beres de Almeida	Ecosystem Services	20-28 July 2013
/34/	Pedro Azevedo Pinto	Ecosystem Services	20-28 July 2013
/35/	Roberto Gomes de Lima	Ecosystem Services	20-28 July 2013
/36/	Maria Tereza da Silva	Ecosystem Services	20-28 July 2013
/37/	Joelma da Silva Campos	Ecosystem Services	20-28 July 2013
/38/	Cidomar da Silva Campos	Ecosystem Services	20-28 July 2013
/39/	Cidomar da Silva Campos	Ecosystem Services	20-28 July 2013
/40/	Giancarlo Raschio	Ecosystem Services	20-28 July 2013
/41/	Christiana Contreras	Ecosystem Services	20-28 July 2013
/42/	Yuri Jordy Nascimento Figueredo	CJP	27 July 2013
/43/	Tiago Ferreira da Cunha	CJP	27 July 2013

The following issues were checked during these interviews:

- The information provided in relation to the deviations from the registered PD
- The information flows for generating, aggregating and reporting the monitoring parameters were checked.
- Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the monitoring plan of the VCS PD /29/ to /43/. The assumptions of the GHG calculations of the Monitoring Report (MR) /1/ were checked against the information provided in the electronic copy inventory information and the inventory excel spread sheets /7/.
- The net GHG emissions and removals calculations were presented in an excel spread sheet. The calculations of the spread sheet were checked during this phase.
- Quality control and quality assurance procedures as part of their quality management system were checked.

2.4 Site Inspections

In the period from 20 to 28 July 2013, a site inspection was carried out in the project area which is part of the project activity. As part of this inspection the following activities were performed:

- An assessment of the implementation and operation of the proposed project activity through visual inspection and through interviews with the project proponent's staff.
- An assessment of the project boundaries and the stratum information were assessed using a Pocket PC with the geographical datasets uploaded and connected to a GPS receiver.
- Revisiting of randomly selected number of inventory sampling plots which were part of the carbon stock inventory of the second monitoring period which were re-measured by the project proponent's staff under observation of DNV GL. Furthermore, the monitoring methods were checked in order to confirm that the monitoring practices followed the requirements of the applicable methodology /13/. Finally, DNV GL performed a consistency check in order to verify the consistency of the previous measurement and the re-measurement, and to verify the correctness of the reported stand growth.
- Confirmation that the quality control and quality assurance procedures were in place.

2.5 Resolution of Findings

A corrective action request (CAR) is issued, where:

- i. Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;
- ii. Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impair the estimate of emission reductions;
- iii. Issues identified in a FAR during validation to be verified during verification have not been resolved by the project participants.

A clarification request (CL) shall be raised if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met.

A forward action request (FAR) is issued for actions if the monitoring and reporting require attention and/or adjustment for the next monitoring period.

As part of the project verification fifteen (15) CARs were raised. The CARs were satisfactorily addressed by the project proponent by revising the net anthropogenic removals calculation and the monitoring report.

Thirty two (32) clarification requests (CL) were identified and were satisfactorily addressed by the project proponent by revising the monitoring report. Three (3) forward action requests (FAR) were identified (refer to Appendix A).

2.5.1 Forward Action Requests

During the audit DNV GL has identified 3 areas of improvement which resulted in the formulation of 3 FARs, most of the FARs where a result of the raising and consequent close out process of CARs and CLs issued during the audit.

- FAR 1 the PP is encourage to assure that at the next Monitoring Report it clearly reports the vintages of VCUs generated during the monitoring period covered by the Monitoring Report.
- FAR 2 the PP is encourage to update the Project Description in the original VCS PD to reflect the additional and new information which result from the approved deviations as part of this verification
- FAR 3 the PP is encourage to look at the current documentation and maps used by the project as these are generally very course and/or lacking useful information which could lead to the issuance of CLs and CARs. Improvements will also enable further efficiencies within the project management.

2.6 Eligibility for Validation Activities

3 VALIDATION FINDINGS

Not Applicable since project had already been registered as a VCS project with project ID 981.

3.1 Participation under Other GHG Programs

Not Applicable since project had already been registered as a VCS project with project ID 981.

3.2 Project Description Deviations

The Project has six deviations from its validated Project Description. The individual deviations and the reasons for the deviations are:

Deviation	Reason for deviation	Assessment by DNV GL
1) Correction of the Overman's allometric equation used at validation in order to account only for dry biomass	In the original PD the project applied a correction factor for fresh to dry biomass which was not required based on the fact that the Overman equation is already based on dry	DNV GL has reviewed as part of the CAR 16 the Araujo et al. 1999 /28/ paper that was cited as reference in the PD /2/ and confirmed that the Araujo et al

	biomass	1999 reason for modifying the Overman et al equation was that the study used fresh biomass. In line with the VCS requirements which require the use of dry biomass data the correction factor applied in Araujo et al 1999 should not be applied. DNV GL has assessed the corrected equation used in its spreadsheets and confirms that it now correctly applies the Overman et al equation using dry biomass. The identified deviation is in line with methodology VM0015 Version 1.1
2) Update of carbon stocks and carbon stock change factors calculations based on the biomass results from the corrected Overman equation	In response to the identification that the Overman equation was incorrectly applied the Carbon Stock dated was required to be updated throughout the project data.	DNV GL re-assessed the spreadsheet and all formula that uses the data derived from the correct Overman equation. DNV GL confirms that the changes to the modified carbon stock are only a result of the correct application of the Overman equation. The identified deviation is in line with methodology VM0015 Version 1.1
3) Update of calculations to determine significance of the pool "Wood Products" using the updated net carbon stock change factors and a logging intensity factor closer to the reality of selective illegal logging in the region of the project	In the original PD the project assumed that 30m ³ /ha (maximum legal volume that can be harvested) would be harvested however following further literature studies, it was identified that this would be an overestimation and based that there is only 23.99 m ³ /ha of valuable species in the area a new harvesting volume has been selected.	DNV GL has assessed the provided publications /24//25//26//27/ of the project developer as well as assessed inventory data /8/. DNV GL concluded that indeed applying a 30m³/ha harvesting level would not be correct for this project due to the fact that these volume are not available within the project area. DNV GL accepts that an harvesting level between 10 and 20 m³/ha is more realistic based on the overall total of 23.99 m³/ha that is found in the area and that

		normally not all trees (100% of inventoried trees) will be harvested and inventory data shows that 10.57 m³/ of total 23.99 m³/ha is classed as high economic value (0.03 m³/ha) or medium economic value (10.54 m³/ha) as such accepts that the project demonstrates the significant of the pool based on a maximum of 20 m³/ha. The identified deviation is in line with methodology VM0015 Version 1.1
4) Modification of the Leakage Belt	1. The Leakage Belt cannot be the same as the Reference Region and overlap it. According to VCS VM0015 methodology: "The methodology defines four spatial domains: a broad "reference region", the "project area", a "leakage belt", and a "leakage management area". The project area, leakage belt and leakage management areas are subsets of the reference region and are always spatially distinct (not overlapping) areas" (VCS VM0015 methodology page 7 section Summary Description of the Methodology).	DNV GL has assessed that the applied deviation results in the identification of the four areas defined under the methodology: reference region, project area, leakage belt and leakage management. Through assessment of the maps provided DNV GL confirms that the areas are distinct of each other as part of the assessment DNV GL raised CAR 5, and CLs 2, 3, 4, 7, 11, 13 in order to satisfy all the requirements. The identified deviation is in line with methodology VM0015 Version 1.1
	2. The validated Leakage Belt does not rely on an Opportunity Cost Analysis or a Mobility Analysis as required by the VM0015 methodology v1.1 (VCS VM0015 methodology v1.1 page 20 section 1.1.3).	DNV GL has assessed the updated leakage belt following its findings in CAR s 2, 3, 4. and CLs 3, 11 it was able to assess that the deviations results in the project uses Option 2 of the methodology (mobility analyses) in which it has justified all agents in the baselines scenario and for each of the 4 deforestation agents identified and justified at least 1 facilitator and 1 constraint. The identified deviation is in line

		with methodology VM0015 Version 1.1
	3. The updated leakage belt has been generated based on the mobility of the main agents of deforestation: squatters, ranchers, loggers (agents of degradation acting as initiators of the deforestation dynamic), and Ribeirinhos. This mobility analysis uses four variables: distance to the Project Boundary, Distance to the Boundary of the Consolidated Deforestation Frontier, Distance to Pioneer Roads, and Distance Covered by Ribeirinhos from River Shores. The updated leakage belt encompasses the Project and has as a limit the equidistance of these two variables (Figure 2 of the Monitoring Report).	DNV GL has assessed the updated leakage belt following its findings in CAR 2,3,4, 6, and CLs 2, 3, 11, 21 it was able to assess that new delineation of the leakage belt identified in Figure 2 of the Monitoring Report represents the correct leakage belt area for both RMDLT and ADPML. The identified deviation is in line with methodology VM0015 Version 1.1
	4. In line with VM0015 methodology the Project must transparently account for the right amount of leakage, <i>"Where strong evidence can be collected that deforestation in the leakage belt is attributable to deforestation agents that are not linked to the project area, the detected deforestation may not be attributed to the project activity and considered leakage"</i> (VCS VM0015 page 115 section 1.2.2). As most of the deforestation in the Reference Region is not cause by the activities of the Project the original leakage needed to be determined.	DNV GL has assessed the updated leakage belt following its findings in CAR 7, CL3, 7, 11 it was able to determine that the project correctly had identified areas which were are under deforestation treat but whose deforestation agents are not directly attributable to the Project. The consequent leakage belt area considers these deforestation agents in line with VM0015 Version 1.1 section 1.2.2. The identified deviation is in line with methodology VM0015 Version 1.1
	5. Agents located within the non-forest frontier existing at the Project start date belong to what the PD identifies as	DNV GL has assessed the updated leakage belt following its findings in CAR 2, 3, 4, 6, and CLs 2, 3, 7, 11, 21 to assess the

	'Consolidated Frontier' that is the area where wealthy deforestation agents are established (close to primary and secondary roads). According to literature, agents in the Consolidated Frontier keep expanding their existing logging and ranching activities, and are not prone to colonize new areas. On the other hand, agents that are expected to encroach into the Project Area are pioneer agents that are driven mostly by land speculation and also by timber prices and the revenues from extensive cattle ranching. For this reason, it makes no sense to assume that all deforestation within the RRD, specially the one developing in the Consolidated Frontier, is a result of agents displaced by the Project. It is far more logical to understand deforestation at the Consolidated Frontier as the result of the expansion of existing deforestation at the Project start date.	behaviour of the different deforestation agents in relation to the start of the project as well as their historic patterns and consequently the different deforestation activities within the project area. Consequently DNV GL has assessed how this effects the leakage belt area and the mobility assessment. The identified deviation is in line with methodology VM0015 Version 1.1
	6. Agents driven by land speculation look for forested areas that appear to be 'unused'. For this reason a pioneer agent that arrives to the Project Boundary and is displaced due to the activities of the Project will want to look for similar areas to encroach. Although agents are very mobile, it is more likely that a pioneer agent already in the vicinity of the Project Boundary would try to encroach on a neighbouring area and not travel tens of Kms to try their luck on another area.	DNV GL has assessed the updated leakage belt following its findings in CAR 2, 3, 4, 6 and CLs 2, 7, 11, 21 as well as the interviews that the DNV GL team undertook within the project area is was able to determine that local agents predominately attributed to the possible displacement of deforestation had limited ability or willingness to move their activities beyond the immediate vicinity of the project area. The identified deviation is in line with methodology VM0015 Version 1.1

	7. The Project cannot displace more deforestation (leakage) than the amount of forest at project start date. The fact that the leakage belt is 7.6 times the size of the Project Area implies that the leakage belt can accommodate much more deforestation than the one displaced by the Project.	DNV GL has assessed the updated leakage belt following its findings in CAR 2, 3, 4, 6, and CLs 7, 11 was able to assess that the overall leakage area could fully accommodate any agents currently being displaced from the project area. The identified deviation is in line with methodology VM0015 Version 1.1
	8. Ribeirinhos are not significant agents of deforestation in the baseline scenario (based on the evidence from the historical period). According to the results of the PRA, Ribeirinhos will not conduct their activities farther than 3Km from river shores.	DNV GL has assessed the updated leakage belt following its findings in CAR 2,3,4,6,7, CL2,3,7,9,11,21 and interviews assessed the impacts of the Ribeirinhos and their mobility within the region and found that their predominant area of activities were localised around the rivers and a high dependents on the river to transport goods out of the area. At the same time having limited means to bring goods to the rivers. These findings were adequately included into the mobility assessment. The identified deviation is in line with methodology VM0015 Version 1.1
5) Addition of all data and parameters monitored (both monitored or not)	Originally PD did not contain all the parameters monitored (both monitored or not)	DNV GL has verified the methodology and the updated PD and concluded that all parameters are now included within the document. The identified deviation is in line with methodology VM0015 Version 1.1
6) Generation of a fixed degradation boundary at project start date, which will be monitored and	The project uses two forest classes Dense Forest and Degraded Forest since both have as end class non-forest the project is not considering	DNV GL has examined the changes in the boundary determination of the Forest Classes for the project start date

assessed at every verification event.	as originally was intended transfer from Dense Forest to Degraded Forest. Based on VM0015 Version 1.1 6.1.1C the boundaries of the areas of each forest class can be fixed.	and the requirements under the VM0015 Version 1.1 6.1.1C. Based on the fact that the project does not and was not intended to claim any credits for the transition of Dense Forest to Degraded Forest as part of the baseline DNV GL approves the fact that the boundaries have been fixed to those at the start date.
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DNV GL confirms that its assessment demonstrates that, in line with requirement 3.6.1 of the VCS standard, the deviation applied by the project does not affect the additionality and/or selected baseline scenario or the applicability of the methodology.

This is because none of the parameters in relation to the additionality, baseline setting as well as the applicability of the methodology are affected nor changed by the implemented deviation by the project. DNV GL checked that all values assessed at validation have remained the same.

3.3 Grouped Project

Not applicable as project is not a Grouped Project

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

4.1.1 Implementation status of the project activity(s)

During the site visits, by observing, reviewing operation records and interviewing relevant staff, community members and affected stakeholders /29/ to /43/, DNV GL was able to verify that the project has been implemented and operated as described in the VCS-PD of 9 November 2014 /2/ and the deviations described within the Monitoring Report /1/.

4.1.2 Implementation status of the monitoring plan and the completeness of monitoring

- **Information (data and variables) provided in the monitoring report that is different from that stated in the registered VCS-PD**

DNV GL checked the monitoring plan contained in the registered VCS-PD of 9 November 2014 /2/ and compared it with the monitoring report version 1.5 of 9 November 2014 /1/, to verify whether there was any difference that would cause an increase in estimates of the GHG removals in the current monitoring period. The tables 6 to 36 of the methodology 'Methodology for Avoided Unplanned Deforestation' VM0015 /4/,/5/,/6/,/7/,/8/,/9/,/13/ were verified against the field and GIS data provided by the project proponent and found to be complete and in line with the requirements of the methodology.

DNV GL confirmed that there is no variation between *ex-ante* estimates and *ex-post* estimated/calculated values/measurements.

- **Compliance of monitoring with monitoring plan**

The monitoring has been carried out in accordance with the revised monitoring plan and formulae contained in the registered VCS-PD of 9 November 2014 /2/.

As required by the monitoring plan /2/ and the applicable methodology VM0015 Version 1.1 /13/ the project proponent effectively monitors the required parameters to determine the project's removals by sinks and emissions by sources.

The parameters reported, including source, frequency and review criteria as indicated in the monitoring plan were verified to be correct and in line with the validated monitoring plan of the VCS-PD. Necessary management system procedures including responsibility and authority of monitoring activities have been verified to be consistent with the VCS-PD. Knowledge of personnel associated with the project activity was also found to be satisfactory.

4.1.3 Remaining issues from previous validation

DNV GL checked the VCS validation report /21/ and confirmed that there were no remaining issues from previous validation.

4.2 Accuracy of GHG Emission Reduction and Removal Calculations

According to the applicable methodology VM0015 Version 1.1 /13/ the net GHG emission reductions and removals for the monitoring period *1 January 2009 to 1 January 2012* /1/ can be determined by two methods (1) "Historical LU/LC-change" and (2) "Modelling". In line with the MP the project applies the Historical LU/LC-change method.

4.2.1 Baseline Emissions

According to the applicable methodology VM0015 Version 1.1 /13/ the avoided baseline emissions for the monitoring period [2009 - 2012] would be:

$$\text{Baseline Emission} = (\Delta \text{Cab BSLPA}_t[\text{above ground biomass}] + \Delta \text{Cab BSLPA}_t[\text{below ground biomass}] + \Delta \text{Cab BSLPA}_t[\text{Litter}]) + \text{EBBBSLPA}_t$$

Whereby

$\Delta \text{Cab BSLPA}_t[\text{above ground biomass}]$ = Total carbon stock change in the above ground biomass of the initial forest classes in the project area (Table 21.b1) /13/

$\Delta \text{Cab BSLPA}_t[\text{below ground biomass}]$ = Total carbon stock change in the below ground biomass of the initial forest classes in the project area (Table 21.b2) /13/

$\Delta \text{Cab BSLPA}_t[\text{Litter}]$ = Total carbon stock change in the litter of the initial forest classes in the project area (Table 21.b3) /13/

EBBBSLPA_t = the GHG Emissions during the Baseline scenario (Table 24) /13/

Whereby

- $\Delta \text{Cab BSLPA}_t[\text{above ground biomass}]$ is calculated as $\Delta \text{Cab BSLPA}_{i,t}[\text{above ground biomass}] - \Delta \text{Cab BSLPA}_{z,t}[\text{above ground biomass}]$
- $\Delta \text{Cab BSLPA}_t[\text{below ground biomass}]$ is calculated as $\Delta \text{Cab BSLPA}_{i,t}[\text{below ground biomass}] - r \text{Cab BSLPA}_{z,t}[\text{below ground biomass}]$

- $\Delta \text{Cab BSLPA}_t[\text{litter}]$ is calculated as $\Delta \text{Cab BSLPA}_{icl,t}[\text{litter}] - r\text{Cab BSLPA}_{az,t}[\text{litter}]$
- EBBBSLPA_t is calculated as $\text{ABSLPA}_{icl,t} * \text{EBBBSL}_{toticl}$

Whereby:

$\Delta \text{Cab BSLPA}_{icl,t}[\text{above ground biomass}] =$ Total carbon stock change in the above-ground biomass of the initial forest classes in the project area

$\Delta \text{Cab BSLPA}_{az,t}[\text{above ground biomass}] =$ Total carbon stock change in the above-ground biomass of post-deforestation zones in the project area

$\Delta \text{Cab BSLPA}_{icl,t}[\text{below ground biomass}] =$ Total carbon stock change in the below-ground biomass of the initial forest classes in the project area

$\Delta \text{Cab BSLPA}_{az,t}[\text{below ground biomass}] =$ Total carbon stock change in the below-ground biomass of post-deforestation zones in the project area

$\Delta \text{Cab BSLPA}_{icl,t}[\text{litter ground biomass}] =$ Total carbon stock change in the litter of the initial forest classes in the project area

$\Delta \text{Cab BSLPA}_{az,t}[\text{litter ground biomass}] =$ Total carbon stock change in the litter of post-deforestation zones in the project area

$\text{ABSLPA}_{icl,t} =$ Area of initial forest class icl deforested at time $t-1$ within the project area in the baseline case; ha

$\text{EBBBSL}_{toticl} =$ Sum of (or total) actual non- CO_2 emissions from forest fire at year t in strata i in forest class icl

Baseline emissions were determined for the following carbon pools as per applicable methodology VM0015 Version 1.1 /13/:

- Above ground biomass (536 611 tCO_2e)
- Below ground biomass (10 417 tCO_2e)
- Litter (9 040 tCO_2e)
- Non- CO_2 emissions from forest fire (22 190 tCO_2e)

The total baseline emissions from the above pools for the monitoring period under review were estimated to be 556 072 tCO_2e . DNV GL verified the baseline data used for the calculations of baseline emissions by examining the Spreadsheets /4/,/5/,/6/ provided by PP. DNV found that all the data was transparently recorded and all formulae were correctly applied.

4.2.2 Project Emissions

Project emissions were estimated according to applicable methodology VM0015 Version 1.1 /13/ as the sum of emissions from ex post project carbon stock changes and ex post project emissions. According to the applicable methodology VM0015 Version 1.1 /13/ the project emissions for the monitoring period [2009 - 2012] would be:

$$\text{Project Emission} = \Delta \text{Cab CPSPA}_t + \text{EBBPSPA}_t$$

Where :

$$\Delta \text{Cab CPSPA}_t = \text{Ex post project carbon stock changes calculated through} = \Delta \text{CPAdPA}_t + \Delta \text{CPAiPA}_t + \Delta \text{CUDdPA}_t \text{ (Table 27) /13/}$$

$$\text{EBBPSPA}_t = \text{Ex Post Project Emissions (Table 28) /13/}$$

Where :

ΔCPAdPA_t = Total carbon stock decrease due to planned activities

ΔCPAiPA_t = Total carbon stock increase due to planned activities

ΔCUDdPA_t = Total carbon stock decrease due to unavoided unplanned deforestation

Ex post project carbon stock changes (43 692 tCO₂e) included:

- Total carbon stock decrease due to planned activities
- Total carbon stock increase due to planned activities
- Total carbon stock decrease due to unavoided unplanned deforestation

Ex post project emissions (1 806 tCO₂e) were the estimated actual emissions of non-CO₂ gasses due from forest fires in the project area.

Hence, the total Project emissions in this monitoring period were estimated to be 45 498 tCO₂e. DNV GL verified the project data used for the calculations of project emissions by examining the Spreadsheets /4/,/5/,/6/ provided by PP. DNV found that all the data was transparently recorded and all formulae were correctly applied.

4.2.3 Leakage

Any deforestation above the deforestation baseline found outside the Project's Boundaries will be considered to be leakage as described in the VM0015 Version 1.1.

$$\Delta\text{CBSLLK}_t = \text{Ex Ante } \Delta\text{CBSLLK}_t - \text{Ex Post } \Delta\text{CBSLLK}_t$$

Where:

ΔCBSLLK_t = Total ex ante net baseline carbon stock change (Table 21.d) & < 0 represents no leakage

Ex Ante ΔCBSLLK_t = Total ex post net actual carbon stock change (Table 21.d)

Ex Post ΔCBSLLK_t = Total ex ante net baseline carbon stock change (Table 21.d)

Carbon stocks in pre and post-deforestation classes are assumed to remain constant, as there are not significant decreases or increases of carbon stocks in the leakage belt. In line with the deviation which is approved the leakage management is included within its sister project RMDLT Portel – Para REDD Project and as such the leakage is considered zero. The data below represents the leakage findings for the RMDLT Portel – Para REDD Project. Hence, the total leakage in this monitoring period would be equal to 0 tCO₂e.

RMDLT and APDML have signed a leakage belt agreement /1/, under the agreement RMDLT takes full responsibility for the monitoring and accounting of any leakage that results from the APDML & RMDLT project. Based on the fact that:

1. RMDLTs leakage belt overlaps for 84% the original APDMLs leakage belt
2. RMDLT project boundaries are 5 times the size of APDMLs and as such have will have more impact on any deforestation agents that will be displaced
3. By joining a unique leakage belt the both projects will eliminate any overlap issues between the individual leakage belt areas

4. Any deforestation outside the boundaries of the two projects and that surpasses the baseline levels, will be attributed to leakage.

DNV GL has assessed the agreement and the implications of this agreement on the overall leakage belt selection and accounting of possible leakage effect by RMDLT on behalf of its own activities and that of ADPML. DNV GL confirms that the total leakage belt area is large enough to account for leakage of both projects.

4.2.4 Summary of GHG Emission Reductions and Removals

The net anthropogenic GHG emissions and removals from the project activity have been calculated as per the registered VCS-PD /2/ and applied methodology VM0015 Version 1.1 /13/. As

$$(\Delta REDD_t) = (\Delta CBSLPA_t + EBBBSLPA_t) - (\Delta CPSPA_t + EBBPSPA_t) + (\Delta CLK_t + ELK_t)$$

Where:

Component	GHG Emissions and Removals (tCO ₂ -e)
Baseline Carbon Stock Change ($\Delta CBSLPA_t$)	556 072
Baseline GHG Emissions ($EBBBSLPA_t$)	22 190
Ex Ante Project Carbon Stock Change ($\Delta CPSPA_t$)	26 765
Ex Ante Project Emission ($EBBPSPA_t$)	1,107
Ex Ante Leakage (ΔCLK_t)	0
Ex Ante Leakage GHG Emissions (ELK_t)	0
Total Ex Ante anthropogenic GHG emission reductions ($\Delta REDD_t$)	550 391

Hence, the total Ex ante anthropogenic GHG emission reductions in this monitoring period would be equal to **550 391 tCO₂e**.

4.3 Quality of Evidence to Determine GHG Emission Reductions and Removals

The project proponent has established management system implemented to ensure that the processes are consistent. The procedures cover: management responsibilities, data monitoring procedures, training procedures, periodical internal audits, management reviews and corrective actions in case of any deviations effectively. Although the quality control and quality assurance measures processes are followed there are areas of improvement which have been identified in FAR 1 to 3.

Responsibilities for the different aspects of the project monitoring are defined and the monitoring plan provided in the VCS PD.

The net anthropogenic GHG emission reductions in the monitoring period *1 January 2009 to 1 January 2012* was verified to be 550 391 tCO₂e while the total VCU would be equivalent to 477 611 tCO₂e.

Sufficient evidence was presented for the reported net anthropogenic GHG emission reductions. The project entity has in place a monitoring system which has specific procedures for the main activities in which are defined responsibilities for the supervision of the activity, a description of the activity, the QA/QC measures in place, and the recording and archiving of the relevant information. As part of the quality system periodical internal audits are carried out by the quality management responsible to ensure

the transparency and accuracy of the data being monitored and recorded. DNV GL verified that this system is in place and confirms the existence of a clear audit trail.

4.4 Non-Permanence Risk Analysis

Following the provisions of paragraph 3.19.2 of the *VCS Version 3.3* /17/, the project participant has conducted a non-permanence risk assessment /3/ following the provisions of the AFOLU Non-Permanence Risk tool: *VCS Version 3.1* /15/. According to this assessment /3/ the overall non-permanence risk rating of the proposed project activity is 13.75 %.

Risk Category	Rating
a) Internal Risk	0
b) External Risk	12
c) Natural Risk	1,75
Overall Risk Rating (a + b + c)	13.75 %

Table 1. Risk ratings for the different risk categories of the proposed project activity.

DNV GL confirmed that the non-permanence assessment has been carried adequately and applying conservative assumptions where needed. A detailed assessment of the risk analysis carried out by the project proponent in the original validation report /21/.

5 VERIFICATION CONCLUSION

DNV (USA) Inc. (DNV GL) has performed the verification of the net anthropogenic GHG removals that have been reported for the “ADPML Portel-Para REDD Project” for the period *1 January 2009 to 1 January 2012*.

The project proponents are responsible for the collection of data in accordance with the monitoring plan and the reporting of the net anthropogenic GHG removals from the project.

It is DNV GL’s responsibility to express an independent verification statement on the reported net anthropogenic GHG removals from the project. DNV GL does not express any opinion on the selected baseline scenario or on the validated and registered VCS-PD.

DNV GL conducted the verification on the basis of VCS requirements, the monitoring methodology VM0015 Version 1.1, the monitoring plan contained in the registered VCS-PD of 9 November 2014, the monitoring report (version 1.5) dated 9 November 2014 and the non-permanence risk report (version 1.0) dated 19 July 2013. The verification included: i) Checking whether the project has been implemented in accordance with the project description; ii) checking whether the provisions of the monitoring plan were consistently and appropriately applied; iii) the collection of evidence supporting the reported data; and iv) the assessment of the non-permanence risk analysis.

DNV GL’s verification approach draws on an understanding of the risks associated with reporting of GHG removals and GHG emissions data and the controls in place to mitigate these. DNV GL planned and performed the verification by obtaining evidence and other information and explanations that DNV GL considers necessary to give reasonable assurance that reported net anthropogenic GHG removals are fairly stated.

In our opinion the net anthropogenic GHG removals of the “ADPML Portel-Para REDD Project” for the period *1 January 2009 to 1 January 2012* are fairly stated in the monitoring report (version 1.5) dated 9 November 2014.

The net anthropogenic GHG removals were calculated correctly on the basis of the approved baseline and monitoring methodology VM0015 Version 1.1 and the monitoring plan contained in the registered VCS-PD of 9 November 2014.

DNV (USA) Inc. verified that the net anthropogenic GHG removals from the “ADPML Portel-Para REDD Project” in the reporting period from *1 January 2009 to 1 January 2012* are:

GHG Emission Reductions or Removals	tCO ₂ e
Baseline carbon stock changes	556 072
Baseline GHG emissions	22 190
Ex post project carbon stock changes	(26 765)
Ex post project GHG emissions	(1,107)
Leakage	0
Net GHG emission reductions or removals	550 391
Buffer (13.75 %)	72 780
VCUs	477 611

DNV GL (USA) Inc. verified that the non-permanence risk rating of the proposed project activity for this verification is 13.75 % which is to be applied to the change in carbon stocks at this verification equal to 550 391 tCO₂e. The amount of VCUs to be issued would be 477 611 tCO₂e.

Oslo and Oakland, 10th Nov 2014.



Edwin Aalders
VCS Verifier
DNV GL Research & Innovation AS



Dave Knight
Approver
DNV (USA) Inc.

APPENDIX A: ASSESSMENT FINDINGS

Use appendices for supporting information. Delete this appendix (title and instructions) where no appendix is required.

Draft report clarifications and corrective action requests by validation team	Summary of response	Validation team conclusion
CAR 1 Standard Reference: VM0015 1.1.4 Document Reference: The leakage management area should be defined according an existing management plan or other plan related to proposed AUD project activity. It appears that no such plan has been used to define the leakage management area. Please define the leakage management area according to an existing management plan or other plan related to the proposed AUD project activity.	The Leakage Management Area map is presented in MR 1.7. For the management plan of the LMA please refer to the shared Dropbox file CAR1	DNV GLASSESSMENT 30 JAN 2014 The analyses presents in MR 1.7 now provides a map in which the location of the leakage area is situated and the Management Plan for the Leakage Management Area provide a detailed overview of activities that the project is undertaken that are based on the principles set out in the PD of the registered project. This finding is closed.
CAR 2 Standard Reference: VM0015 1.1.3.a, 4.1.2 Document Reference:PD 2.4.6.1, 2.4.6.2, MR 2.2 The mobility analysis to define the leakage belt requires a list of all relevant criteria that facilitate the mobility of the main deforestation agents identified in step 3 of the methodology. The Project Description identifies that there are four main deforestation agents (riberinhos, cattle ranchers, loggers, squatters) however the revised mobility	All the relevant criteria have been included. Please refer to MR 2.2 <u>ANSWER Round 2:</u> This finding does not apply to the Projects. Constraint analysis as for step 4.1.2 in the VM0015 methodology (page 47 item 1) is only required under Approach “B” (time function) whereas the Projects utilize Approach “A” (historical average) as indicated in section 3.1.1 of the PD. <u>Therefore,</u> CAR 2 should have been closed long ago.	DNV GL ASSESSMENT 21 OCT 2013 The analysis presented in MR 2.2 now lists the main deforestation agents identified step 3. The overall suitability of the land for the activities of deforestation agents shall be consistent with the criteria used to assess deforestation constraints in step 4.1.2 of the methodology. No constraints are identified in the PD “Annex: Methodology Procedures Used in the Projection of the Location of Future Deforestation (Modelling).” The inclusion of the

Draft report clarifications and corrective action requests by validation team	Summary of response	Validation team conclusion
analysis in the Monitoring Report only considers relevant criteria for squatters. Please list of all relevant criteria that facilitate the mobility of the main deforestation agents and incorporate these into the analysis.	ANSWER Round 3: Please refer to section “Mobility Analysis” in the MR v1.5 (page 30 ADPML and page 18 RMDLT). All baseline deforestation agents are being considered in the mobility analysis and at least one factor and one constraint have been identified for each one of the agents as per VM0015 methodology section 1.1.3, Option II, page 23.	factor “Distance to Consolidated Deforestation Frontier” is not consistent with step 4.1.2 of the methodology. Please be consistent with criteria used to assess deforestation constraints with step 4.1.2 of the methodology. Per section 1.1.3.c of the methodology, please justify the assumption and weight assigned to all the individual criteria including the weight assigned to the criteria “Distance to Consolidated Deforestation Frontier.” DNV GL ASSESSMENT 30 JAN 2014 DNV GL believes that there might be a level of confusion in relation to some of the wording that is being used. It is acknowledge by the team that the PP has in line with section 1.1.3 Option IIa (page 23 of methodology) of the methodology has identified as part of the mobility analyses a facilitator (3 in total) and a constraint (1). However at the same time as part of the constraint the PP has introduced a new agent (Consolidated Frontier). This agent appears to be predominantly “larger” cattle ranges that can be found around the area but not in the immediate vicinity of the project. Since the PP has also identified that among others cattle ranges are

Draft report clarifications and corrective action requests by validation team	Summary of response	Validation team conclusion
		among the deforestation agents for the project. The introduction of the Consolidated Frontier appears to suggest that there are two type of cattle rangers. Or that the deforestation drivers are more linked to the type of communities then to what the communities do. As the PP has identified that some of the agents my shift their activities from one deforestation to another. In the original baseline scenario cattle ranges did not seem to have been split up two type of cattle rangers and as such when defining the constraints for the deforestation agents identified in the baseline scenario as part of the within the mobility analyses the deforestation agents should be considered the same as defined in the baseline scenario and the mobility analyses. Current mobility analyses has defined a constraint for part of the deforestation agents of the baseline but has not defined a constraint for all the types of cattle rangers or a constraint that is not different from the different cattle ranger types. DNV GL ASSESSMENT 13 FEB 2014 DNV GL has analysed the revisions in the MP and confirms that the MP now provides as part of the mobility analyses an justifications for all deforestation agents identified during the

Draft report clarifications and corrective action requests by validation team	Summary of response	Validation team conclusion
		baseline scenario has been provided. For each of the 4 deforestation agents a minimum of one facilitator and one constraint has been identified and justification has been provided. For all the 4 deforestation agents a total of 3 facilitators has been identified: 1. Distance to Project Boundary 2. Distance to Pioneer Roads 3. Distance to Navigable Rivers There are two constraints identified which do not all apply for all the agents equally. For the loggers, cattle rangers and squatters the constraint is the distance to the Consolidated Frontier while for the Ribeirinhos, the distance from the river is identified as a constraint. CAR is closed
CAR 3 Standard Reference: VM0015 1.1.3.b, 4.1.2 Document Reference:PD 2.4.6.1, 2.4.6.2, MR 2.2 For each additional criterion identified as a result of CAR 2, generate a map using GIS. Please generate maps for the same criterion as step 4.1.2.	Maps have been generated. Please refer to MR 2.2	The Monitoring Report now includes maps generated from all of the criteria identified in the mobility analysis. This finding is closed.
CAR 4 Standard Reference: AFOLU	The criterion “road network” has been included in the analysis. Please refer to	The criterion “Distance to Pioneer Roads” has been

Draft report clarifications and corrective action requests by validation team	Summary of response	Validation team conclusion
4.6.1, 4.6.15, VM0015 1.1.3.a Document Reference:MR 2.2 Leakage shall be calculated by monitoring forested areas surrounding the project and other forested areas within the country susceptible to leakage from project activities. Observations during the site visit indicate that the deforestation agents are highly mobile. The mobility analysis does not consider the road network as a criterion that facilitates the deforestation agents. Please revise the mobility analysis to include this criterion for all identified deforestation agents from step 4 of the methodology.	MR 2.2.	included in the mobility analysis. This finding is closed.
CAR 5 Standard Reference: AFOLU 3.4.2.d, VM0015 1.1.3 Document Reference: The areas not being verified shall be considered in the leakage management, mitigation and accounting. The area fixed at verification is smaller than intended at validation. These areas are not included in the leakage management area. Please include the areas not being verified in the leakage management, mitigation and accounting of the project.	The Standard Reference: AFOLU 3.4.2.d indicates that “where less than 80 percent of the total proposed area of the project is under current control at validation, the following applies: d) where the area fixed at verification is smaller than intended at validation, areas that at verification have not come under control of the project shall be considered in the leakage management, mitigation and accounting”. At validation, 100% the proposed area for ADPML was under control of the project, as proved by the documents presented to the auditors, and by the interview they had with the land manager's attorney. Therefore, item d) of the AFOLU reference do not applies to the ADPML project.	This finding is closed.
CAR 6	Please refer to the file CAR6 in the shared	DNV GL ASSESSMENT 30 OCT

Draft report clarifications and corrective action requests by validation team	Summary of response	Validation team conclusion
Standard Reference: VM0015 1.1.4 Document Reference: The leakage management area is where the project proponent implements activities that will reduce the risk of activity displacement leakage. During the site visit, interviews with riberinhos indicated that activities have not been implemented in the leakage management area. Please implement activities that will reduce the risk of activity displacement leakage or provide evidence that such activities have been implemented.	Dropbox. ANSWER ROUND 2: in 2009-2011 there were no leakage management activities for the following reasons: - There was not a validated PD thus there was not an approved Management Plan for a Leakage Management Area (LMA), - Without a Management Plan for a LMA, the actual LMA could not be defined and didn't exist, - Without a LMA there was no physical place to implement leakage displacement activities. Nevertheless, all leakage has been quantified and accounted for as demonstrated by the submitted tables. According to the finding, the Project <i>will</i> implement leakage management activities in the LMA accordingly to Management Plan of the LMA, once this plan (currently under revision at verification) has been approved and verification for the 2009-2011 period is closed.	2013 The provided document describes proposed activities for loggers/squatters /ranchers in the leakage management area. However, the reported occurrence of these activities is the project area, not the leakage management area: "reporting and subsequent enforcement [...] stopped illegal activities and deforestation agents from encroaching the Project Area." Likewise the activities listed in the provided document correspond to project activities as listed in the PD and not to any of the activities specified in the management plan for the leakage management area that was provided in the response to CAR 1. Please implement activities as described in the management plan for the leakage management area that will reduce the risk of activity displacement leakage or provide evidence that such activities have been implemented. DNV GL ASSESSMENT 30 JAN 2014 The project start date is 1 January 2008 and as such the project activities described in the registered PD need to have been implemented as of this start date. The fact that the PD was not yet validated till later is not a reason for not implementing the project in line with the described

Draft report clarifications and corrective action requests by validation team	Summary of response	Validation team conclusion
		activities within the PD unless the PD would have addressed this by means of a deviation. Current argument used by the PD would argue that leakage would need to be assumed to be at a maximum level as it appears that it has not implemented activities to reduce risk. Within the PD leakage management is partly addressed through assumption that leakage agents would be given incentives (employment with project etc) that would take away the need to undertake leakage activities. However MP indicates that “Leakage for the period was identified as the accumulated deforestation that exceeded baseline estimations within the leakage belt” and consequently states “However, because of the Leakage Belt Agreement with the neighbour RMDLT Portel-Para REDD project, the leakage for the project in the 2009-2011 period is zero.” The project was able to demonstrate that the actual deforestation is below the baseline estimates and as such this finding has been closed. An FAR has been raised to highlight the need to fully implement the leakage risk activities. This finding is closed. FAR3 raised

Draft report clarifications and corrective action requests by validation team	Summary of response	Validation team conclusion
CAR 7 Standard Reference: AFOLU 4.6.1, 4.6.1.1, 4.6.2, 4.6.15.2 Document Reference: PD 2.4.6, 2.5.1 Market leakage occurs when projects significantly reduce the production of a commodity causing a change in the supply and market demand equilibrium. As observed during the site visit and presented in the Project Description, commodities are produced in the baseline case (timber, cattle, farinha). Please account for market leakage if the project significantly reduces the production of these commodities. Or, show that the reduction of the commodity is not significant per the VCS Standard.	Please refer to the file CAR7 in the shared Dropbox. ROUND 3 Answer: The recorded harvest tree volumes are the result of field observation records collected during the biomass inventory conducted by the PP in 2011-2012. Such biomass data is the same that was used for the calculations of carbon stocks in the spreadsheet 'Carbon results_Overmann 1994_Two forest classes' presented at validation and verification. Default values for these calculations were obtained from the following sources: • Logging intensity: Putz et. al. 2008 (Monteiro, Cardoso et al. 2012) • Coefficient of volumetric efficiency: Pereira, Santos et al. 2010 • Wood density: IPCC 2003 (the highest value was increased by 30% to be conservative) • Conversion factor: IPCC 2003	DNV GL ASSESSMENT 30 JAN 2014 The analyses presents in CAR 7 document and Wood products RMDLT.xls, Wood products ADPML.xls and Cattle-market leakage.xlsx show that the actual market leakage appears to be below the threshold of 5% (significances). The CAR 7 document outline the principle behind the adopted calculation but the document did not make clear what the basis of the collected data was that has been included in the excel sheets, i.e. are the recorded harvest tree volumes from field observations records, official logging records etc. Please clarify the basis of the logging information included in the Wood products RMDLT.xls, Wood products ADPML.xls. DNV GL ASSESSMENT 11 FEB 2014 Based on the response and the assessment the analyses present that that the observed activities and their associated emission are considered not significant as per the VCS Standard (< 5%) CAR Closed
CAR 8 Standard Reference: VM0015 6.1.1.c, VCS 2.4.1	The Projects' baseline assumes that the final LU/LC is non-forest land. At the start date of the baseline period, the Project Area is composed by two forest classes	DNV GL ASSESSMENT 30 JAN 2014 Based on the response from the Project Proponent reconfirming

Draft report clarifications and corrective action requests by validation team	Summary of response	Validation team conclusion
Document Reference:MR 2.2 If in the baseline case the forest within the project area is degrading, a map sequence showing the spatial and temporal sequence of forest classes with successively lower carbon stocks must be prepared to account for the degradation occurring prior to deforestation. Observed during the site visit, it appears that forest is degraded before being deforested as several commercial logging operations were observed causing measureable forest degradation. This is supported by the Monitoring Report which references logging and deforestation agents that leave trees with large canopies to hide their activities from surveillance (Margulis 2004). Please provide a map sequence showing the spatial and temporal sequence of forest classes with successively lower carbon stocks to account for the degradation occurring prior to deforestation in the baseline case per the requirements of the methodology.	(initial classes), Dense Forest (DF) and Degraded Forest (dF), which are projected to change into non-forest lands (NF) (final class). Because of this deforestation dynamic, the baseline doesn't consider the change from one forest class to another (DF to dF) as a final class. For this reason, the boundaries of the areas of each forest class at project start date are assumed to remain fixed. According to VM0015 6.1.1.C "If the boundary of the forest classes undergoing degradation is fixed (i.e. does not change over time) it is sufficient to show the estimated changes in carbon stocks in a table". Therefore, it is not necessary to prepare a map sequence showing the spatial and temporal sequence of forest classes with successively lower carbon stocks must be prepared to account for the degradation occurring prior to deforestation. Nevertheless, in order to be accurate and conservative, the Project will use remote sensing imagery to review this fixed degradation boundary at every verification event to account for GHG emissions from unavoided degradation. ROUND 3 Answer: Please refer to the Monitoring Report section 3.3 Monitoring Plan / 1.1.1 / 1. Forest Monitoring – 3rd paragraph (page 97 ADPML and 85 RMDLT).	the principle behind the project the auditor could accepts to close out the CAR, however the project will require to modify its monitoring plan to reflect its intention to review the fixed degradation boundary at every verification event to account for GHG emissions from unavoided degradation. DNV GL ASSESSMENT 11 FEB 2014 After analyses the changes and updates of the Monitoring Plans within the Monitoring Reports have been found in line with the expectations. CAR Closed
CAR 9 Standard Reference: VCS 3.16.6 Document Reference:MR 3.3	The Monitoring Plan has been amended, please refer to MR 3.3	DNV GL ASSESSMENT 30 JAN 2014 The analyses presents in MR 3.3 the monitoring plan now includes information around calibration

Draft report clarifications and corrective action requests by validation team	Summary of response	Validation team conclusion
Where measurement equipment is used, it shall be calibrated. The monitoring plan does not contain information about the calibration of equipment. Please amend the monitoring plan to reflect the calibration of measurement equipment.		needs. This finding is closed.
CAR 10 Standard Reference: ISO 14064-2 5.10 Document Reference: Please describe how equipment has been calibrated where applicable for each data and parameter.	The Monitoring Plan has been amended, please refer to MR 3.3	DNV GL ASSESSMENT 30 JAN 2014 The analyses presents in MR 3.3 the monitoring plan now includes information around calibration needs. This finding is closed.
CAR 11 Standard Reference: VM0015 Appendix 5, VCS 3.16.6.3 Document Reference:MR 3.2 Some data and parameters monitored are not provided in the Monitoring Report. Please provide all data and parameters, even if not monitored or used.	All data and parameters have been updated. Please refer to the Monitoring Report MR 3.2.	DNV GL ASSESSMENT 30 JAN 2014 The analyses presents in MR 3.2 the data and parameters have been all included. This finding is closed.
CAR 12 Standard Reference: AFOLU 4.3.1, VM0015 6.1.1.e Document Reference: The carbon stock of post-deforestation classes must be estimated. Litter, non-tree biomass and tree biomass are included carbon pools. During	The Projects now conservatively account for the carbon pools in the post-deforestation class by using the carbon stock of pastures, which is the highest between the two final LULC classes. Please refer to the root of the shared Dropbox, file 'Carbon results_Overmann 1994_Two forest classes > Tab Stock Change Factor'	DNV GL ASSESSMENT 30 JAN 2014 The analyses presents in 'Carbon results_Overmann 1994_Two forest classes > Tab Stock Change Factor' the data and equations are all confirmed. This finding is closed.

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the site visit, areas classified as non-forest were observed that contain significant litter, non-tree biomass and tree biomass. Contrary to this observation, the baseline case assumes that there is no residual litter, non-tree biomass or tree biomass and thus these pools are thus are not accounted for. Please account for these carbon pools in the baseline case as the carbon stock of post-deforestation classes is not zero.		
CAR 13 Standard Reference: VCS 3.16.5.2 Document Reference:MR 2.1 The Monitoring Report shall include the implementation status of project activities. The Monitoring Report does not include the implementation status of project activities. Please include the implementation status of all project activities in the Monitoring Report.	The implementation status has been updated in the MR 2.1	DNV GL ASSESSMENT 30 JAN 2014 The analyses presents in MR 2.1 reflecting the status of implementation of the project has been included and found satisfactory. This finding is closed.
CAR 14 Standard Reference: Document Reference: Please correct the discrepancy of the lower 90% confidence limit in Table 15 compared to cell G45 of 'Above and Below-ground Biomass' tab of "Carbon results_Overman	The discrepancy has been corrected. Please refer to the root of the shared Dropbox, file 'Carbon results_Overmann 1994_Two forest classes > Tab 15'.	The discrepancy has been corrected. This finding has been closed.

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1994_27Dec2012.xls" identified by the review of calculations during the site visit.		
CAR 15 Standard Reference: VM0015 6.1.1.c, Step 3 1.1.3.b, VCS 2.4.1 Document Reference: If carbon stocks in the project area are decreasing in the project case, it will have to be accounted. Areas subject to unplanned and significant carbon stock losses must be estimated. Although not a planned project activity, active logging was observed in the project area during the site visit at two different points. Conditions of skid trails suggest that logging occurred during the monitoring period. An extensive network of active skid trails was observed that may result in significant decreases in carbon stocks. Please account for carbon stocks in the project area that are decreasing in the project case per the methodology.	The Projects now account for decreasing carbon stocks due to forest degradation. The Projects have prepared a fixed degradation boundary map at project start date using a 2008 Landsat TM image. Digitalization and visual interpretation were used to define the boundaries of degraded forests. The resulting areas of the two forest classes (Dense Forest and Degraded Forest) were used to calculate how much baseline deforestation falls within each class. For tables and calculations please refer to the root of the shared Dropbox, files: Baseline Deforestation 2011_Two forest classes Tables ADPML_Degradation_Verification 2013 Tables RMDLT_Degradation_Verification 2013	DNV GL ASSESSMENT 30 JAN 2014 The analyses presents in Tables ADPML_Degradation_Verification 2013.xlsx and RMDLT_Degradation_Verification 2013.xlsx provide the measurements and calculations of the stock change due to the active logging activities within the project area during the monitoring period. This finding is closed.
CAR 16 Standard Reference: Document Reference: Carbon results_Overmann 1994_Two forest classes.xls Sheet "Trees equations" Column Y =0,465*POWER(Q4;2,202)/0,6	Project has updated the equations and associated tables have been updated and corrected within the Project documentation. For tables and calculations please refer to the root of the shared Dropbox, files: Carbon results_Overmann	DNV GL ASSESSMENT 04 November 2014 The assessment of the • Carbon results_Overmann 1994_Two forest classes_CORRECTED without moisture.xls showed that the overman equation is now correctly represented within

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where the Overman equation is $DB=0.465(DBH)2.202$	1994_Two forest classes_CORRECTED without moisture.xls - Tables ADPML_final two classes_no moisture_1st verification.xls - Tables ADPML _two classes_no moisture_40yr.xls - ADPML VCS PD_FINAL_VCS UPDATE_Aug 2014.doc - Monitoring Report_ ADPML _VCS UPDATE.doc	column Y of the Sheet “Trees equations” and consequently all affected tables and reports have been assessed and found correctly to be updated. This finding is closed.
CL 1 Standard Reference: VCS 2.3.2.1, Program Definitions, VM0015 Part 3 1.1.1 Document Reference:MR 2.1 The project activities alter the conditions identified in the baseline scenario and are eligible for immediate crediting. In the absence of explicit spatial records (such as GPS data or detailed maps), ribeirinhos were interviewed in the project area and could not confirm that any monitoring patrols had ever visited that portion of the project area where deforestation was predicted to have occurred in the baseline case. As this is the sole project activity identified as implemented during the monitoring period , please provide additional evidence (see CL 12), other than the monitoring reports previously provided, that these activities occurred and where these activities occurred in the project	Please refer to the file CL1 in the shared Dropbox. <u>ANSWER ROUND 2:</u> This finding does not conform with the verification manual or the VCS standard for the following reasons: 1. Activities that avoid unplanned deforestation started in 2009 before there was a VCS-validated Project Design (PD) to follow. Such validated PD was available only in 2013. Because the Project under VCS requirements can be implemented once there is a validated PD to comply with, activities from 2009-2011 cannot be considered ex-post but ex-ante activities (VVB Manual, page 6: “Verification is conducted once project implementation has commenced. It is the ex-post assessment of the monitored GHG data and information.”). Patrolling activities from 2009-2011 are ex-ante (because these are indicated in the PD and evidences to support them were available at validation as the PD’s Annex 7) and giving the fact that the PD has been validated, it means all ex-	DNV GL ASSESSMENT 21 OCT 2013 The project proponent has provided evidence that forest monitoring patrols took place during the monitoring period: 1) IBAMA declaration that anonymous reports of illegal activities were received in the region. The declaration does not identify that the project proponent filed these reports. The annex of the declaration shows that the region includes the project area. 2) Annual report summaries from Camargo Malachias and Advogados Associados to Jonas Morioka. The reports were translated by Alexandre Camargo Malachias. The report summaries refer to specific activities in several glebas in the project area. Multiple report summaries identify specific estimates of avoided emissions resulting from the deterrence of deforestation agents. The reports also

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area that resulted in the claimed emissions reductions.	ante data and documents comply with the requirements of the VCS Standard and the VM0015 Methodology (VCS Standard 3.4, page 44: "The objective of validation or verification shall be in conformance with the VCS rules and the methodology applied to the project."). Additionally, the same evidences for 2009-2011 patrolling activities have been submitted to the verification body thus the Proponent complies with the Methodology (VCS VM0015 Methodology, page 107: "Project activities implemented within the project area should be consistent with the management plans of the project area and the PD. All maps and records generated during project implementation should be conserved and made available to VCS verifiers at verification for inspection to demonstrate that the AUD project activity has actually been implemented"). 2. Additional evidences (IBAMA statement, payment receipts, patrol crew statements) were provided to the verification body, however the auditor requires spatially explicit evidences with higher detail (GPS points). Such spatially explicit evidence for the 2009-2011 period <u>was neither indicated to exist in the PD nor submitted as evidence at validation</u>. The Proponent has made a considerable effort to gather additional and independent evidences to fulfil the auditor's request however asking for spatially explicit details that do not exist is not practical given the costs associated with gathering those data now. Therefore, this request is contrary to the Accuracy Principle that requires that bias and uncertainty should be reduced as far as is practical (VCS Standard 3.4, page 6). At the same time, 2009-2011 patrolling reports	indicate the charcoal operations would have been present in the project area. 3) Payment receipts to forest patrol crew members dating back to 2009. The receipts do not show that activities actually occurred or where these activities occurred in the project area if they occurred. 4) Statements from patrol crews in English listing patrols several times a year to glebas within the project area. The statements indicate that activities occurred but specifically where these activities occurred in the project area other than by list of glebas. Evidence 1 does not identify the project proponent as the reporting entity and therefore does not confirm that project activities altered the conditions identified in the baseline scenario. Please provide copies of the reports that were filed with IBAMA to confirm the declaration is based on project activities. The project proponent should possess a copy of these reports if they were filed with IBAMA. Evidence 2 is translated summary reports. The reports pre-date the project start date and repeatedly reference avoided emissions from deforestation. Based on evidence collected during the site visit, the original intent of the patrols was to protect land title absent the conception of the

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	are mentioned as evidence in the validated PD and were available to the validators in the PD's Annex 7, so if the PD was validated it means all the data and documents presented at validation comply with all VCS Standard's Principles (VCS Standard 3.4, page 44: "The objective of validation or verification shall be in conformance with the VCS rules and the methodology applied to the project.") 3. Data and evidences supporting the information in the validated PD (ex-ante) must not present Material aspects, meaning such evidences must provide a reasonable level of assurance about the occurrence of the facts and activities indicated in such validated PD (VCS Standard 3.4, page 43: "The validation/verification body shall select samples of data and information to be validated or verified to provide a reasonable level of assurance and to meet the materiality requirements of the specific project."). Therefore, all data included in a validated PD provides a reasonable level of assurance and have no Material aspects (VVB Manual, page 8: "In a reasonable level of assurance engagement, the VVB must test a sufficient amount of data to ensure with confidence that no material errors are present."). In conclusion, because reports for the 2009-2011 patrolling activities were accepted and validated as part of the PD it means they provide a reasonable level of assurance that patrolling activities actually took place as described. This conclusion is further based on the fact that a VVB cannot leave Material aspects	avoided deforestation projects. This is corroborated by Evidence 4 which states the objective of the patrols "was to protect the areas from invasions and resources extraction, but without the specific methodology related to the requirements of a carbon project." It is therefore unexpected that estimates of avoided emissions from deforestation are referenced in the report summaries. Please provide original copies of the reports and clarify this inconsistency between provided evidence. Evidence 3 does not appear to be applicable to the findings as it does not show that activities actually occurred or where these activities occurred in the project area if they occurred. This evidence only supports that patrol crews were paid. Evidence 4 indicates time periods of patrols attested by some patrol crew members. It is unclear that the patrol crew members understood the statements as they are written in English. Please confirm that the patrol crew members who signed these statements are fluent in English. The above supplied evidence does not contain any spatially explicit information, beyond the name of the gleba in which the

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	open at validation (VVB Manual, page 34: "In the case of validation, it is unacceptable for VVBs to leave material discrepancies unresolved (e.g., deficiencies in a project's data management system), which a verifier may need to ensure is addressed at a later date."). Because DNV GL validated the Project's PD, it means DNV GL recognizes that evidence provided at validation does not contain Material aspects thus provides a reasonable level of assurance to corroborate 2009-2011 patrolling activities. According to the above-cited quote from the VVB Manual, DNV GL cannot consider the same exact evidence to provide a reasonable level of assurance at validation but then not at verification. <u>Therefore</u>, CL1 should not have been even raised in the first place, given that the evidence presented is consistent with the evidence mentioned in the validated PD.	patrolling activities may have occurred. In the absence of spatially explicit records, the evidence does not confirm that any monitoring patrols had ever visited that portion of the project area where deforestation was predicted to have occurred in the baseline case. However evidence to the contrary was independently observed during the site visit. Please provide detailed and consistent evidence that project activities prevented emissions in the portion of the project area where deforestation was predicted to have occurred. At this time DNV is not able to arrive at a reasonable level of assurance that project activities altered the conditions identified in the baseline scenario and should be credited. DNV GL ASSESSMENT 30 JAN 2014 The analyses presents that the project incorrectly uses the assumption that the monitoring activities during 2009 and 2011 are ex-ante. The project start date is set to be 01/01/2008 and as such project is to be following its implementation in line with the Validated PD from that moment. In line with the VCS requirements a Validation can take place after the project start date. During the validation the project is being assessed on whether the project meets the

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		requirements of the VC standard and can be implemented as such, whilst during the verification of a project it is verified whether the project is being implemented in line with the validated PD and the methodology requirements. As such evidence that is being presented during Validation may not always be sufficient during Verification. On the basis of the other CARs & CLs that have been closed out the audit team is able to close out this CL as changes in the project implementation have now been accounted for through the actions undertaken in the close out of the other CARs and CLs. This finding is closed.
CL 2 Standard Reference: VM0015 2.d Document Reference:MR 1.7 The Monitoring Report identifies that non-forest areas exist within the project boundary. Upon interviewing Ecosystem Services during the site visit, it was identified that the non-forest areas are actually outside the project boundary. Please update the Monitoring Report to reflect the correct project boundaries that only contain forest prior to the project start	The Monitoring Report has been updated to reflect that the project boundary only contain forest prior to the project start date. Please refer to MR 1.7.	The Monitoring Report now clearly states that the project area contains only forest. This finding is closed.

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date.		
CL 3 Standard Reference: VM0015 1.1.3, 1.1.4 Document Reference: PD 2.3.1 Table 5, MR 2.2, PD 2.4.1 Activities are implemented in the leakage management area to reduce the risk of activity displacement leakage. The leakage belt is the area where the baseline activities could be displaced due to project activities. The Monitoring Report identifies that the agents of deforestation are pioneer agents that are outside the project area at interior of the frontier of deforestation (squatters and cattle ranchers) and not in the leakage management area (only ribeirinhos). Likewise, the Project Description documents that the agents of deforestation rely on road networks in the reference region however no roads are included in the leakage management area. Given the current definition of the leakage belt and the leakage management area for the project, please clarify how the leakage management area reduces the risk of baseline activities being displaced due to project activities when some of the agents of deforestation do not exist in the leakage management area.	Agents of deforestation not currently in the LMA will be identified through patrolling activities. Every agent identified will be approached, informed that that is private land currently under a conservation project, and will be invited to the LMA to receive training on improved forest management. The idea is to provide the opportunity to participate in the project activities to every single agent of deforestation according to the VM0015 methodology section 8.2. The objective is that through capacity building on improved pasture management, deforestation agents won't need to deforest extensive areas of forest to conduct their economic activities. Additionally, the Project will report to IBAMA all deforestation agents that arrive to the Project Boundary. The objective is to aid the institution in its enforcement activities, thus reducing the amount of forest that is cleared by pioneer agents. <u>Answer Round 2:</u> Between 2009-2011 there weren't leakage management activities because there was not a validated PD, thus there wasn't a defined LMA or LMA management plan. Even so, the Project acted by improving surveillance in the area by both boosting evidence of the presence of the landowner and by increasing the presence of IBAMA in the area. These activities dissuaded invasive agents from encroaching the Project Area (See CAR 6). It should be pointed out that activities for the 2009-2011 occurred before the PD was validated thus are considered ex-ante, and	DNV GL ASSESSMENT 30 OCT 2013 The provided description does not identify how the leakage management area (LMA) reduces the risk of baseline activities being displaced due to that project as the primary agents of deforestation (squatters and cattle ranchers) appear not to be included in the leakage management area and thus are not being addressed by the management plan for the leakage management area cited in response to CAR 1. Given the current definition of the leakage belt and the leakage management area for the project, please clarify how the leakage management area reduces the risk of squatting and cattle ranching being displaced due to project activities when the “objective is to aid the institution in its enforcement activities.” As a result of enforcement activities, squatters and cattle ranchers will be displaced. The management plan for the leakage management area (see CAR 1) states that “the Project cannot offset the opportunity cost of cattle ranchers so the best it can do is to prevent leakage by

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	by the PD being validated it is understood that these activities comply with the requirements of the VCS Standard and the VM0015 methodology (VCS Standard 3.4, page 44: "The objective of validation or verification shall be in conformance with the VCS rules and the methodology applied to the project.") (See CL 1). Nevertheless, all leakage and unavoided unplanned deforestation has been quantified and accounted for this period. For the 2013-2048 period, the Project will implement leakage management activities in the LMA to address and reduce as possible the displacement of deforestation agents. As indicated in the LMA Management Plan (Project Activity #8), the Project will provide capacity building to cattle ranchers on sustainable pasture management. At the same time, these agents will be offered the opportunity to learn about agroforestry systems and to participate in the sustainable businesses initiatives that may arise from the Project Activity #7. By offering this opportunities, the Project complies with the VM0015 methodology that states: " VM0015, Section 8.1, page 94: To reduce the risk of activity displacement leakage, baseline deforestation agents should be given the opportunity to participate in activities within the project area and in specially designated leakage management areas (outside the project area) that together will replace baseline income, product generation and livelihood of the agents as much as possible, so that deforestation will be reduced and the risk of displacement minimized." Deforestation agents that are identified as trying to encroach the Project Area will be invited to the LMA to receive the aforementioned training. As indicated by the VM0015 methodology, the objective of the Project Activities is to "replace baseline	providing training on the benefits and techniques of improved pastures managements." DNV GL ASSESSMENT 30 JAN 2014 The analyses presents that the PP incorrectly assumes that the PD is only validated in 2013 and as such all activities between 01/01/2008 (project start date) and 2013 Validation would be ex-ante. If this assumption were to hold true it would lead to the fact that no credits could be issue for the period 2009 – 2011 as the project start date would have been the date of validation. On the basis that the project has closed out other CARs and CLs related to the project activities and the correction of project emissions due to among other logging activities this CL has been closed out. A FAR has been issued to reflect the need to implement the project in line with the PD. This finding is closed. FAR3 raised

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	income, product generation and livelihood of the agents as much as possible , so that deforestation will be reduced and the risk of displacement minimized ". The Project aims to provide new techniques to replace the way that deforestation agents currently generate their income, but the Project cannot offset the opportunity cost of current deforestation practices, because current practices respond to causes that are beyond the control of the Project and are the responsibilities of local and national governmental institutions. The Project is not required to stop all deforestation in the Leakage Belt; any leakage will be quantified and accounted.	
CL 4 Standard Reference: VM0015 1.1.4 Document Reference: PD 2.3.1 The leakage management area should be located outside the project area. However, the leakage management area appears to be defined inside the project area. Please clarify in the Monitoring Report that the leakage management area is entirely outside the project area with a map showing the boundaries of the leakage management area relative to the project area.	The clarification has been made and a map has been added both to MR 1.7	The Monitoring Report now clearly states that the leakage management area is outside the project area. This finding is closed.
CL 5 Standard Reference: VM0015 1.1.4 Document Reference: The boundaries of the leakage	Please refer to the file CL5 in the shared Dropbox.	The boundaries provided are clearly defined using common projections and GIS software. This finding is closed.

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management area should be clearly defined using common projection and GIS software formats used in the project. Please provide these boundaries in a common projection and GIS software format.		
CL 6 Standard Reference: VM0015 1.1.1 Document Reference:MR 2.2.1 The leakage belt is a subset of the reference region. Please clarify this requirement in the Monitoring Report.	Section 2.2.1 item #1 of the MR does indicate that the leakage belt is a subset of the reference region by quoting the VM0015: <i>"The methodology defines four spatial domains: a broad "reference region", the "project area", a "leakage belt", and a "leakage management area". The project area, leakage belt and leakage management areas are subsets of the reference region and are always spatially distinct (not overlapping) areas" (VCS VM0015 methodology page 7 section Summary Description of the Methodology)."</i> This CL does not apply.	The provided reference to section 2.2.1 is providing adequately the status of the leakage belt. This finding is closed.
CL 7 Standard Reference: Validation Report Document Reference:MR 2.2 At the time of validation, the auditor did not decide on the shape of the leakage belt. Please clarify this in the	Section 2.2.1 item #2 of the MR has been updated to solve this CL.	The Monitoring Report has been updated to clarify this statement. This finding is closed.

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Monitoring Report.		
CL 8 Standard Reference: VM0015 1.1.3 Document Reference:MR 2.2 Please provide da Silva Viana 2009 and exactly where in the reference it gives the average density of unofficial roads (page number).	Da Silva Viana 2009 (Expansão de estradas e desmatamento em unidades de conservação do município de Belterra, Pará) has been added to the shared Dropbox, file CL8. The reference can be found in page 1576, section 3.Resultados e Discussão, 1st paragraph.	DNV GL ASSESSMENT 30 JAN 2014 The information has been updated to clarify this statement. This finding is closed.
CL 9 Standard Reference: VM0015 1.1.4 Document Reference:MR 2.3 During the site visit, interviews with ribeirinhos indicated that no squatters have come to the area to get control of forested areas. Please provide evidence from the results of the PRA (ESLLC 2009?) which supports that loggers and squatters get control of areas that appear to be under no productive use or forested areas.	During the PRA the mechanisms of interaction with local villagers were more comprehensive (i.e. participatory workshops, one-on-one interviews) and were held under different dynamics (i.e. informal interviews, questions regarding land tenure/logging were kept for the end, more relaxed interaction). On the contrary, interviews during the verification fieldtrip were quicker, more direct, and with many “foreign” people present. For these reasons, it cannot be expected for these quick interviews during the verification field trip to yield the same results as the PRA. Regarding the fact that agents look for areas under no productive use, the literature identifies that agents encroach areas under no productive use and that such occupation generate conflicts with farmers with unclear land tenure. At the same time, the PRA identifies that Ribeirinhos in the area have unclear land tenure and also identifies the potential of conflict with timber operations. Regarding invasion of lands under no productive use:	DNV GL ASSESSMENT 30 JAN 2014 The analyses presents and the reasoning of the PP the CL is being closed as evidence is showing the various treats and developments of land tenure rights and dynamics within the region. This finding is closed.

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	<u>Araujo 2009 indicates:</u> “According to the Statute of the Land of 1964, later incorporated in the 1988 Brazilian Constitution as the legal basis of land reform, squatters have the right to settle on undeveloped public lands and to make private use of them. The Constitution also recognizes the squatters' right to claim for private land that is not in productive use. In practice, forestlands are considered as unproductive areas (e.g. Margulis, 2003). Consequently, forested lands in Amazon are more vulnerable to invasions by squatters and redistribution by the INCRA, than pasture and agricultural lands.” <u>May 2011 indicates:</u> “Historically, producers in the Amazon have been actively encouraged to clear the rainforest as proof of ‘productive’ activity under land-titling laws and for the acquisition of credit.” Regarding weak land tenure and conflicts: <u>PRA 2012 (G.1.6, 2nd paragraph):</u> “In the project area, the PRA points out a high degree of informality on land tenure. Very few people have forest licenses or authorizations granted by the Secretary of Patrimony of the Para State, the Lands Institute of Para – ITERPA as well as possession certificates issued and registered in INCRA. But in most cases, people do not have accreditation documents of the areas they manage, nor have they defined lands physical boundaries between properties. Also at the community level, farmers do not have	

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	recorded the measures or the boundaries of their villages.” <u>PRA 2012 (G.1.6, Conflicts):</u> “..at the level of community and resources management, the PRA has identified problems that could generate conflict. Such problems are generated by the presence of foreign extraction of resources such as timber..”. <u>Araujo 2009 indicates:</u> “insecure land property rights prevail resulting in violent land conflicts and expropriation procedures.” “Farmers who do not have legal land titles cannot successfully prosecute to enforce their rights.. It is often the case that property rights are secured through occupation of the land, resorting to violence (Margulis, 2003). <u>May 2011indicates:</u> “ In areas of recent frontier expansion, deforestation is often practiced within the context of land grabbing (grilagem), whereby access rights to land are based on fraudulent land titles and, typically, the use of violence against landless farmers and traditional populations who hesitate to abandon their properties... In such areas, deforestation patterns also correlate with the opening of clandestine roads by illegal loggers...”	

Draft report clarifications and corrective action requests by validation team	Summary of response	Validation team conclusion
	Conclusion: The PRA identifies the fact that Ribeirinhos in the area have unclear land tenure and also identifies the potential of conflict with timber operations. This is directly related to the literature that identifies the existence of conflicts with agents that occupy forest areas and indirectly related to the literature that indicates that agents occupy areas under no productive use.	
CL 10 Standard Reference: VM0015 1.1.5 Document Reference:MR 2.4 Please provide Araujo 2009 that supports that loggers and squatters get control of areas that appear to be under no productive use or forested areas.	Araujo 2009 indicates (see file CL10 in Dropbox): - <u>Regarding land tenure and conflicts:</u> - o “insecure land property rights prevail resulting in violent land conflicts and expropriation procedures.” - o “Farmers who do not have legal land titles cannot successfully prosecute to enforce their rights.. It is often the case that property rights are secured through occupation of the land, resorting to violence (Margulis, 2003). - <u>Regarding invasion of lands under no productive use:</u> - o “According to the Statute of the Land of 1964, later incorporated in the 1988 Brazilian Constitution as the legal basis of land reform, squatters have the right to settle on undeveloped public lands and to make private use of them. The Constitution also recognizes the squatters' right to claim for private land that is not in productive use. In practice, forestlands are	The project proponent has provided the requested literature. This finding is closed.

Draft report clarifications and corrective action requests by validation team	Summary of response	Validation team conclusion
	considered as unproductive areas (e.g. Margulis, 2003). Consequently, forested lands in Amazon are more vulnerable to invasions by squatters and redistribution by the INCRA, than pasture and agricultural lands.”	
CL 11 Standard Reference: VM0015 1.1.3, AFOLU 3.4.2.d Document Reference: The leakage belt is fixed at validation for a 10-year period. The leakage belt has been changed since validation. Please justify that VM0015 has appropriate leakage methods that may be used in the event the entire project area does not come under control of the project area (those areas not included in verification) where those areas not under control must be considered in leakage accounting (see CAR 5).	At validation, 100% the proposed area for ADPML was under control of the project, as proved by the documents presented to the auditors, and by the interview they had with the land manager’s attorney. At verification, 100% of the new project area is under control of the project given that this new area is a sub-set of the original project area at validation. Because of the aforementioned reasons and because of the reasons stated in the answer for CAR5, this CL does not apply to the ADPML project.	This finding is closed.
CL 12 Standard Reference: Document Reference:MR 2.2 Monitoring reports generated from forest monitoring activities have been cited. Please provide documentation of all events and a map of where the events were observed in the portion of the project area being verified. Summarize types of events,	Please refer to the file CL12 in the shared Dropbox. <u>Answer Round 2:</u> This finding does not apply to the Project. The reports for the 2009-2011 patrolling activities were presented at validation in the PD’s Annex 7. At no point was the Proponent indicated to have	DNV GL ASSESSMENT 30 OCT 2013 The project proponent has provided a map of the areas to be verified and patrolling activities summarized by dates and locations for the areas being verified (Patrolling activities 2013.xls). The maps and summary table are very coarse (spatially and

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dates and locations for the areas being verified (Patrolling activities 2013.xls). Also see CL 1 for additional evidence of the implementation of project activities.	GPS points for the activities held during that period and there is no requirement for the measuring of GPS points for patrolling activities in the VCS Standard or the VM0015 Methodology. The Project was validated based on the information and data provided thus it is understood that these data do not present any material aspects (VVB Manual, page 34: <i>"In the case of validation, it is unacceptable for VVBs to leave material discrepancies unresolved (e.g., deficiencies in a project's data management system), which a verifier may need to ensure is addressed at a later date."</i>). Because the VVB (DNV GL) validated the Project's PD, it means that VVB recognized that evidence provided at validation does not represent Material aspects thus provides a reasonable level of assurance to corroborate 2009-2011 patrolling activities. According to the above-cited quote from the VVB Manual, VVB cannot consider the evidence providing a reasonable level of assurance at validation not to provide such assurance at verification. The same data available for VVB at validation is available for the VVB at verification thus those exact same data must be sufficient to support the	temporally) which makes the verification of the implementation of project activities difficult. If possible, please provide more detailed maps of where project activities occurred in the areas to be verified. DNV GL ASSESSMENT 30 JAN 2014 The PP in correctly quote the VCS requirements although at validation it can be assessed whether the proposed monitoring process would allow proper assessment of the parameters and it verification, it is not a guarantee that during verification a non-conformity and or CL can be raised against that process if actual verification demonstrates that VVB is not able to objectively verify monitoring activities. For example at validation system may rely on permanent markers to have been placed in the field, however at verification it is found that such permanent markers where destroyed or not as permanent as anticipated resulting in VVB and/or PP not being able to verify the data. However, on the basis that the team was able to verify some of the information provided the team agree to close the CL and to raise a FAR as part of a continuous improvement point to the project:

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	existence of 2009-2011 activities.	CL Closed FAR 3 raised
CL 13 Standard Reference: VM0015 4.1, 4.2, 4.2.3 Document Reference:MR 2.2 The reference region boundaries have changed for ADPML and the projection of future deforestation per step 4 of the methodology has subsequently changed. Please all required analysis in step 4 including deforestation rate and the Figure of Merit (FOM).	Methodology for the revised projection of future deforestation, including deforestation rate and the Figure of Merit (FOM) is presented as an annex. Please refer to file CL19 in the shared Dropbox.	The project proponent has provided evidence that the analysis has been repeated for the updated reference region boundaries. This finding is closed.
CL 14 Standard Reference: VM0015 2.4 Document Reference:MR 2.2 The reference region boundaries have changed for ADPML and the projection of future deforestation per step 4 of the methodology has subsequently changed. Please confirm that the same LU/LC data as cited in the Project Description were used for the revised projection of future deforestation.	The same LU/LC data as cited in the Project Description were used for the revised projection of future deforestation.	The project proponent has confirmed that same LU/LC data cited in the Project Description were used for the revised projection. This finding is closed.
CL 15 Standard Reference: VM0015	Factor maps and deforestation risk maps have not changed. Please refer to file CL19 in the shared Dropbox (Annex:	The project proponent has confirmed that the factor maps

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4.2.2 Document Reference:MR 2.2 The reference region boundaries have changed for ADPML and the projection of future deforestation per step 4 of the methodology has subsequently changed. Please confirm that the factor maps and deforestation risk maps have not changed. If they have, please provide these data.	methodology for the revised projection of future deforestation).	and deforestation risk maps have not changed. This finding is closed.
CL 16 Standard Reference: VCS 3.11 Document Reference: Please provide official copies of land title that are used to establish conclusively the right of use.	Please refer to file CL16 in the shared Dropbox.	The project proponent has provided copies of land title and right of use. This finding is closed.
CL 17 Standard Reference: VCS 3.11.1, 3.18.2.7, VCS Program Definitions Page 12 Document Reference:PD 1.12 Please provide an independent, detailed legal opinion that the project proponent has right of use per VCS Standard Section 3.11.1. The opinion shall specify that the right of use is unconditional, undisputed and unencumbered for each of the five properties included in the project area to be verified along with the rational used to arrive at this opinion. In the opinion,	Please refer to file CL17 in the shared Dropbox.	The project proponent has provided an independent legal opinion of the document review. However, the legal opinion states that the certificates for Miritizal “require to be updated due to the fact they were issued long time ago and only can be verified if they contain all information and registers if issued on the date of 30 days before the signature of Agreements with Mr. Jona Morioka.” Please provide updated Public Certificate for Miritizal and independent legal opinion of the new document. The opinion does not specify that the right of use is unconditional,

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please explicitly state that that the right of use existed during the dates of the monitoring period and for those properties in the project area being verified. Also, please explicitly state that the right of use is transferred retroactively to the project proponent as the entities were formed after the project crediting period start date. In the response to this finding, please identify which criterion(a) are being used to demonstrate the right of use. The language from this criterion(a) should be referenced in the opinion and the opinion should be in English.		undisputed and unencumbered. The opinion does not explicitly state that that the right of use existed during the dates of the monitoring period. The opinion does not explicitly state that the right of use is transferred retroactively to the project proponent as the entities were formed after the project crediting period start date. The response to this finding does not identify which criterion(a) are being used to demonstrate the right of use. Please revise the response and opinion to include these omissions. DNV GL ASSESSMENT 30 JAN 2014 The PP has provided an addendum to the Legal Opinion in which it is confirmed that based on the documentation provided by the PP the addendum concludes that: • <i>"The right of use by the Proponents is unconditional, undisputed and unencumbered as consequence of the Para State Rule.</i> • <i>The right of use existed during the dates of the monitoring period within January 1st, 2009 and January 1st, 2013.</i> • <i>The criteria used to demonstrate the right of use is based under Brazilian legal system</i>

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		<i>that clearly provides that the right of use is proved by physical presence and actual use of land."</i> Based on the documentation provided DNV GL concludes that sufficient evidence is provided to demonstrate ownership and user right. This finding is closed.
CL 18 Standard Reference: AFOLU 4.3.3 Document Reference: Please list all sources that are being claimed as insignificant and show that together they are de minis. If the total estimated GHG benefit of the project changes as a result of findings or other cause, please ensure that the de minis calculations are consistent with the most recent estimate of the GHG benefit.	The excluded pools are the same that at validation: - Dead Wood: because is less present in the baseline scenario than in the Project scenario, thus is conservatively excluded. - Soil Organic carbon: not to be measured when forest is converted to pastures in the baseline scenario according to the VM0015 methodology. - Harvested wood products: calculations were updated to reflect the new carbon stock change factor after accounting for Degraded Forest and still not significant for both projects. Please refer to the file 'Carbon results_Overmann 1994_Two forest classes > Tab Stock Change Factor' in the root of the shared Dropbox.	DNV GL ASSESSMENT 30 JAN 2014 The analyses presents via Carbon results_Overmann 1994_Two Forest classes > Tab stock Changes Factor provide necessary information to assess conformity with the requirements This finding is closed.
CL 19 Standard Reference: VM0015 4.2, 2.6 Document Reference:MR 1.1.2, 2.2 Please provide the methodology for the revised projection of future deforestation and reference it in the Monitoring Report as an annex (also see	Please refer to the file CL19 in the shared Dropbox.	The project proponent has provided a methodology for procedures using in the projection of the location of future deforestation. However, the Monitoring Report does not reference this annex. This finding is closed.

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CL 15).		
CL 20 Standard Reference: Validation Report, VM0015 1.3, AFOLU 4.5.16 Document Reference: During the site visit, logs were observed on landings that appeared to be marked for export from the project area. This implies that timber may be used for wood products as logging is included the baseline case. Long-lived wood products are classified as lasting a least 5 years (not 100 years). The validation report concludes that wood products are insignificant at 4.7% of total avoided GHG emissions. Please provide the referenced document "WOOD products.pdf" that was supplied during project validation.	Please refer to the file CL20 in the shared Dropbox.	DNV GL ASSESSMENT 30 JAN 2014 The analyses presents ADPML_Degradation_Verification 2013.xlsx and RMDLT_Degradation_Verification 2013.xlsx which demonstrate that overall logging has resulted to insignificant emissions. This finding is closed.
CL 21 Standard Reference: VM0015 4.2, VCS 3.13.3 Document Reference: During the site visit, riberinhas indicated that no squatters (or cattle ranchers) had ever approached the project area. The baseline case relies on the scenario that squatters create land title and then sell to cattle ranchers. Riberinhas indicated that the closest sign of cattle ranching activity is over 4 hours	Please refer to the file CL21 in the shared Dropbox. <u>ANSWER Round 2: This finding does not apply for the following reasons:</u> 1. There are no Project Deviations regarding the deforestation model and the accuracy of the deforestation model was assessed and approved at validation, which means the quantitative and spatial components of the deforestation	DNV GL ASSESSMENT 21 OCT 2013 Evidence observed during the site visit and desk review suggests the projection of the location of deforestation is inaccurate. To support the accuracy of the projection of deforestation, additional evidence was requested for the reported portion of the project area that would have been deforested in the baseline case. The project proponent has

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away by boat. As demonstrated during the site visit, subtracting the projected location of deforestation as of 2011 from the observed deforestation shows significant commission and omission errors in the reference region. Although the quantity of predicted deforestation (deforestation rate) seems reasonable, the Figure of Merit (FOM) for the projection of the location of future deforestation is 19%. The errors, low FOM and lack of evidence for the occurrence of the baseline case in the project area suggest the projection of the location of deforestation is inaccurate. Please provide additional evidence that the reported portion the project area would have been deforested in the baseline case, specifically ameliorating the contrary observations cited in this finding. This finding is drafted under the observation that no project activities could be verified in the vicinity of the portion of the project area predicted to have been deforested in the baseline case.	model comply with the requirements of the VCS Standard and the VM0015 Methodology (VCS Standard 3.4, page 44: “The objective of validation or verification shall be in conformance with the VCS rules and the methodology applied to the project”). 2. The auditor indicates in the finding “Although DNV GL agrees that the FOM is in conformance with the methodology, the low FOM reported for the selected spatial model and remains a concern about the accuracy of the deforestation predictions in the project area. This concern is further substantiated by the facts that the project area is moderately distant to the consolidated frontier and that distance to the consolidated frontier is being applied as a constraint to deforestation in the delineation of the leakage belt (see CAR 2).” which is not applicable because: • If the FOM is in conformance with the VM0015 methodology thus it means there are no Material aspects regarding such indicator. • The FOM does not refer to the accuracy of the deforestation predictions, but to the accuracy of the model between time 1 and 2 (VM0015 methodology, page 54: “The FOM is a ratio of the intersection of the observed change (change between the reference maps in time 1 and time 2) and the predicted change (change between the reference map in time 1 and simulated map in	provided the following evidence: 1) An excerpt from an IBAMA declaration that “in our experience, these illegal loggers are the first step in a chain of events that leads to the establishment of ranchers through deforestation.” The excerpt does not reference the reported portion of the project area that would have been deforested in the baseline case. 2) Patrolling records and literature citations. The patrolling records indicate the presence of “invasive agents” in the ownership without reference to the reported portion of the project area. Literature supports the “chain of events” as presented in Evidence 1 and repeatedly in other project documentation, but without reference to the reported portion of the project area that would have been deforested in the baseline case. 3) A description of why the FOM conforms to the methodology and a justification for the commission/omission errors in the projection of the location of deforestation. The FOM (18%) is based on the best of three models to project the location of deforestation. In the description, the commission/omission errors are generally attributed to a projection of a small area of deforestation relative to the area in which forest-cover change might occur, citing Pontius et al 2008. The provided description indirectly references the reported portion of the project area that would have been deforested

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	<i>time 2) to the union of the observed change and the predicted change.”)</i> There is a misunderstanding regarding the variable “Distance to the consolidated frontier”: it means that the farther one is from the consolidation frontier, the higher are the chances for pioneer agents to deforest. At the same time, CAR 2 does not apply because Constraint analysis as required for step 4.1.2 in the VM0015 methodology (page 47 item 1) is only required under Approach “B” (time function) whereas the Projects utilize Approach “A” (historical average) as indicated in section 3.1.1 of the PD. 3. DNV GL validated the PD with the deforestation model. This means that the model is accurate and doesn’t have material discrepancies according to the VCS Standard and VM0015 Methodology. The deforestation model has not suffered any changes thus there are no deviations from the PD. This means that at verification DNV GL cannot find the model to have Material discrepancies (<i>VVB Manual, page 34: “In the case of validation, it is unacceptable for VVBs to leave material discrepancies unresolved (e.g., deficiencies in a project’s data management system), which a verifier may need to ensure is addressed at a later date.”).</i> Therefore, CL21 should not have been	in the baseline case as a “small area.” Although DNV GL agrees with the excerpt provided in Evidence 1, we conclude that it does not provide any new information to support the accuracy of the projection of deforestation. The patrolling reports provided in Evidence 2 reference Boa Vista I, a gleba in the project area where a portion is reported to have been deforested in the baseline case. Active logging was observed in this gleba during the site visit but not reflected in the provided reports from 2010 or 2011. Riberinhos in the area indicated that logging had been active for several years. Provided that the “chain of events” quoted in response to this finding begins with illegal loggers, then the patrol reports should reflect the prevention of illegal logging in Boa Vista I during the monitoring period which led to the emissions reductions. However the reports do not reflect any action in this area with regard to illegal logging or cattle ranching. Further, given the apparent duration of active logging in this gleba which is not reported in the patrolling records, it is difficult to conclude that any monitoring patrols visited the area (less so to the portion of the area projected to have been deforested in the baseline case) during the monitoring period. The referenced literature provides no

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	raised in the first place.	new information specific to the reported portion the project area that would have been deforested in the baseline case. Although DNV agrees that the FOM is in conformance with the methodology, the low FOM reported for the selected spatial model and remains a concern about the accuracy of the deforestation predictions in the project area. This concern is further substantiated by the facts that the project area is moderately distant to the consolidated frontier and that distance to the consolidated frontier is being applied as a constraint to deforestation in the delineation of the leakage belt (see CAR 2). The project area and the portion of the project area projected to be deforested in the baseline case are moderately distant to the consolidated frontier and the projection of the location of future deforestation is conditional on observations of deforestation near the consolidated frontier in the reference region. The cited paper Pontius et al 2008 concludes that “errors vanish at coarser resolutions, since near errors of location over small distances become resolved as resolution becomes slightly coarser” which seems reasonable. However because the small areas projected to be deforested in the project area are far from the consolidated frontier and at the opposite side of the coarser reference area, it seems that

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		there is substantial uncertainty in these predictions due to near error as quoted from Pontius et al. To this point, DNV GL finds that the quantity of predicted deforestation (deforestation rate) is reasonable for the coarser reference area, however not at the spatially explicit scale within the project area: much of the predicted quantity of deforestation could have occurred outside the project area near the consolidated frontier in the baseline case. The above supplied evidence does not support the accuracy of the projection of the location of deforestation to a reasonable level of assurance. Given the magnitude of baseline emissions claimed by the project proponent, the accuracy of the spatial model is paramount to show that project activities have avoided real baseline emissions At this time DNV GL is not able to arrive at a reasonable level of assurance that reported baseline conditions exist such that they could be altered by the project activities. DNV GL ASSESSMENT 30 JAN 2014 The assessment of the analyses confirmed that the deforestation model was implemented and validated correctly in line with the methodology requirements. As such the Verification does not question the applied model. The team nonetheless questions whether the project is able to fully

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		assess the activities within and around the project area on the basis that project appears to be not yet fully implemented or not yet able to capture effectively all information will continue to have difficulty in proving objectively that either deforestation has been prevented or that predicted treats are occurring in areas that have not seen an active protection by the project. The audit team concurs with the current PP findings and evidence provided however will raise a FAR 3 to address overall need to enhance record keeping of project implementation. CL Closed FAR 3 raised
CL 22 Standard Reference: Document Reference: Please provide a shapefile that shows the area within the project area being verified that is predicted to have been deforested in the baseline case. This area should match the quantities used to determine emissions reductions in the baseline case in Table 11.b.	Please refer to the shared Dropbox, file CL22.	The project proponent has provided shape files of the areas predicted to be deforested in the baseline case. The areas match the quantities listed in Table 11.b. This finding is closed.
CL 23 Standard Reference: Document Reference: During the site visit, the field measurement teams indicated	Although the initial protocol for the biomass inventory indicated that lianas were to be measured, the management team from SETA Ambiental confirmed that, during the field work, lianas were conservatively excluded from measurements. For this reason, lianas are	The project proponent has clarified this issue. This finding is closed.

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that they measure and record lianas (vines) in the carbon stock sampling. Some vines observed were greater than 10cm in diameter. Please identify which carbon pool includes lianas and how the biomass of lianas is estimated.	not part of any of the considered pools.	
CL 24 Standard Reference: Document Reference: Please include all tables (including ex-post estimates) in the Monitoring Report that are used in the quantification of GHG emissions reductions or removals.	All the tables have been included in the MR and the original excel tables can be found in the root of the shared Dropbox, files: Baseline Deforestation 2011_Two forest classes Tables ADPML_Degradation_Verification 2013 Tables RMDLT_Degradation_Verification 2013	The Monitoring Report now includes all tables used in the quantification of GHG emissions reductions or removals. This finding is closed.
CL 25 Standard Reference: Document Reference: Please justify why the weights used in "Carbon results-Overman 1994_27Dec2012.xls" are based on the area of LU/LC classes in the sampling area as opposed to those in the project area where emissions reductions are being generated.	The weights was been updated to reflect the actual LU/LC classes in the project area. The tables have been updated to reflect this change.	DNV GL ASSESSMENT 30 JAN 2014 The analyses of the updates presented are in line with the requirements. This finding is closed.
CL 26 Standard Reference: VM0015 1.1.2, 2.4, 2.5 Document Reference: MR 2.1,	Please refer to the shared Dropbox, file CL26. Evidence of pre-processing and post-processing steps applied to 2011 Landsat	DNV GL ASSESSMENT 30 JAN 2014 The analyses presents that the accuracy assessment and methodology are in line with the

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1.1.2 Please provide the results of the accuracy assessment for the 2011 LU/LC-change analysis in the Monitoring Report. Please also provide all other required information, including but not limited to evidence of pre-processing and post-processing steps.	image area the same as described in the Annex_Classification_Verificacion, in the shared Dropbox file CL26.	requirements. This finding is closed.
CL 27 Standard Reference: VM0015 Step 3 1.1.1 Document Reference: Please provide management plans for the project area.	Please refer to the shared Dropbox, file CL27.	This finding is closed.
CL 28 Standard Reference: Document Reference: Please provide evidence that the total size (hectares) of the project area to be verified matches that of sum of the total areas represented in the official title documents.	Please refer to the file CL28 in the shared Dropbox.	This finding is closed.
CL 29 Standard Reference: Document Reference:MR 2.1 Please provide the exact date of the Landsat scene in 2011 in the Monitoring Report and a reference to where the scene	Satellite image Landsat 5 TM. Acquisition time: July 4th, 2011. Path 225/row 062. Source: INPE web page (http://www.dgi.inpe.br/CDSR/)	The project proponent has provided the requested information. This finding is closed.

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was acquired.	The data has been updated in the Monitoring Report section 2.1	
CL 30 Standard Reference: VCS 3.16.2 Document Reference: Please include a description of the quality management procedures to manage data and information in the Monitoring Report.	Please refer to MR 3.3.	This finding is closed.
CL 31 Standard Reference: Document Reference: Please provide an official notice that all taxes have been paid during the monitoring period for all five properties.	Please refer to the file CL31 in the shared Dropbox.	DNV GL ASSESSMENT 30 JAN 2014 The analyses presents that all necessary official documentation has been presented demonstrating that all taxes have been paid. This finding is closed.
CL 32 Standard Reference: VCS 3.11.1 Document Reference: The title abstract for Alvorado I shows that INDUSTRIAL RIO MUIRAPIRANGA is the current owner. Please confirm the current owner, legal size of property in hectares and that the right of use has been transferred to the project proponent.	INDUSTRIAL RIO MUIRAPIRANGA is the current owner and has granted representation rights to Mr. Michael Greene to develop carbon conservation projects. At the same time, Mr. Greene has signed an agreement granting ownership rights to RMDLT over the carbon from Alvorado I (17,4242 ha). Please refer to the file CL32 in the shared Dropbox.	The project proponent has provided information to clarify ownership and right of use on the property. This finding is closed.
CL32	Section 2.1 of the MR report has been updated to now included as part of the	DNV GL ASSESSMENT 4

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Standard Reference: Document Reference: Monitoring Report Section 2.1 & 2.3.1.3 The monitoring report makes reference to an agreement between ADPML and RMDLT about a shared leakage area however it is not clear how the project has assessed and concluded that the project has zero leakage.	summary: “As for the Leakage Belt Agreement, RDMLT will offset all leakage generate in the common Leakage Belt. Calculations of ex ante and ex post deforestation in the Leakage Belt were used to determine if leakage had to be accounted for, as showed in Section 4.3, Tables 21.d and 35 of this document. In conclusion, because ex post deforestation in the Leakage Belt is lower than its ex ante estimation, leakage for the project in the 01/Jan/2009-01/Jan/2012 period is zero.” For MR please refer to the root of the shared Dropbox, files: Monitoring Report_ADPML_VCS UPDATE.doc	November 2014 DNV GL assess the updated text and confirms that the provided information clearly outlines how the project has concluded that the leakage is zero. This finding is closed.
FAR 1 Standard Reference: VCS Registration and Issuance 4.1.7 Document Reference: MR 4.4 The project proponent has not reported vintages in the Monitoring Report. Subsequently, no vintages can be verified and thus no vintages can be registered. Most registries require vintage years. The project proponent may wish to report vintages to facilitate registration.		
FAR 2 Standard Reference: VCS 3.6.1 Document Reference: The Project Description may be		

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updated to reflect changes in original project design and additional information.		
FAR 3 Standard Reference: Methodology VM0015 Document Reference: Part 3 The maps and summary table are very coarse (spatially and temporally) which makes the verification of the implementation of project activities difficult. If possible, please provide more detailed maps of where project activities occurred in the areas to be verified. Consider using GPS and detailed monitoring records to document the implementation of project activities.		