

ANNEX 3

ASSESSMENT

REGARDING POST REGISTRATION CHANGES

M/S MANGALAM TIMBER PRODUCTS LIMITED
REFORESTATION OF DEGRADED LAND BY
MTPL IN INDIA

Report No: 8108367257 – 11/634

Date: 2013-06-27

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Assessment Report on post registration changes	Report No.	Rev. No.	Date of 1st issue:	Date of this rev.
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Project:	Title:	Registr. date:	UNFCCC-No.:	
	Reforestation of degraded land by MTPL in India	2011-08-01	5016	
Project Participant(s):	Name:	Party:		
	Mangalam Timber Products Limited	India		
Applied methodology/ies:	Title:	No.:	Scope:	
	Afforestation and reforestation of degraded land	AR-ACM 001 ver. 4	14	
Post Registration Changes:	Type of requested changes	Number of changes	Prior Approval required	
	<input type="checkbox"/> Temporary deviations from the MP	-	<input type="checkbox"/>	
	<input type="checkbox"/> Temporary deviations from the MM	-	<input type="checkbox"/>	
	<input type="checkbox"/> Corrections that do not affect the project	-	<input type="checkbox"/>	
	<input type="checkbox"/> Change to the start date of the crediting p.	-	<input type="checkbox"/>	
	<input type="checkbox"/> Permanent changes from the MP	-	<input type="checkbox"/>	
	<input type="checkbox"/> Permanent changes from the MM	-	<input type="checkbox"/>	
	<input type="checkbox"/> Design changes to the project activity/PoA	-	<input type="checkbox"/>	
	<input checked="" type="checkbox"/> Changes specific to A/R	Several small	<input type="checkbox"/>	
Revised PDD:	Title:	Attached in TC:	Attached clean:	
	Reforestation of degraded land by MTPL in India	Not required for A/R projects		
Assessment team / Technical Review and Final Approval	Assessment Team:	Technical review:	Final approval:	
	Lokesh Chandra Dube (TL, TE) Ashwin AS (TM, TE)	Alexandra Nebel	Alexandra Nebel	
Assessment Opinion:	<input type="checkbox"/> The post registration changes require prior Approval by the Board			
	<input checked="" type="checkbox"/> The post registration changes do not require prior Approval by the Board			
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	2013-06-27 Annex 3 PRC Report.doc	25		

Abbreviations

A/R, A&R, AR	Afforestation/Reforestation
BEF	Biomass Expansion Factor
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
DBH	Diameter at Breast Height
t-CER	Temporary Certified Emission Reduction
CO₂	Carbon dioxide
CO₂eq	Carbon dioxide equivalent
CL	Clarification Request
ER	Emission Reduction
FAR	Forward Action Request
GBH	Girth at Breast Height
GHG	Greenhouse gas(es)
LULUCF	Land Use, Land Use Change and Forestry
MP	Monitoring Plan
MR	Monitoring Report
MTPL	Mangalam Timber Products Limited
PA	Project Activity
PDD	Project Design Document
PP	Project Participant
PSP	Permanent Sample Plot
QA/QC	Quality Assurance / Quality Control
UNFCCC	United Nations Framework Convention on Climate Change
XLS	Emission Reduction Calculation Spread Sheet

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1 OBJECTIVE / SCOPE

M/s Mangalam Timber Products Limited has commissioned the TÜV NORD JI/CDM Certification Program (CP) to assess post registration changes of the project

“Reforestation of degraded land by MTPL in India”

This report serves for all kind of post registration changes as defined in the PS.

In this case it serves as an annex to the verification report.

2 GENERAL CHARACTERISTICS

2.1 Project Characteristics

As this assessment was carried out as part of the 1st verification of the project activity please refer to chapter 2 of the verification report.

2.2 Overview of Post Registration Changes

Within this report post registration changes as listed in Table 2-2 are assessed.

Table 2-2: Overview Post Registration Changes

#	Applicable as of / from - to	Type of post registration change ¹⁾	Description
1	201x-xx-xx to 201x-xx-xx	TDfrMP	-
2	201x-xx-xx to 201x-xx-xx	TDfMM	-
3	201x-xx-xx	CrPDD	-
4	201x-xx-xx	ChSD	-
5	201x-xx-xx	PCfrMP	-
6	201x-xx-xx	PCfMM	-
7	201x-xx-xx	CoPD	-
8	2001-06-25	CstAR	Several small changes during implementation

- ¹⁾
- TDfrMP : Temporary deviation from registered monitoring plan
 - TDfMM : Temporary deviation from the monitoring methodology
 - CrPDD : Corrections to the registered PDD
 - ChSD : Change to the start date of the crediting period
 - PCfrMP : Permanent changes from registered Monitoring Plan
 - PCfMM : Permanent changes from Monitoring Methodology
 - CoPD : Changes to the project design of a registered project activity / PoA
 - CstAR : Changes specific to afforestation or reforestation

2.3 Assessment team members and technical reviewers

As this assessment was carried out as part of the 1st verification of the project activity please refer to the main part of the verification report.

2.4 Assessment Steps

The *assessment of post registration changes* consisted of the following steps:

- Appointment of team members and technical reviewers
- A desk review of the registered PDD^{/PDD/} submitted by the client and additional supporting documents
- On-Site assessment (if required)
- Background investigation and follow-up interviews with personnel of the project developer and its contractors,
- Resolution of corrective actions (CARs / CLs) (if any)
- Final reporting
- Technical review
- Final approval.

In this case all activities were carried out as part of the 1st verification of this project activity.

2.5 Review of Documents

The registered PDD and supporting background documents related to the project design and the post registration changes were reviewed.

As far as required the assessment team used additional documentation by third parties like host party legislation, technical reports referring to the project design or to the basic conditions and technical data.

2.6 Follow-up Interviews

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

During validation the validation team has performed interviews to confirm selected information and to resolve issues identified in the document review. The main topics of the interviews are summarized in table 2-4.

Table 2-4: Interviewed persons and interview topics

Interviewed Persons / Entities	Interview topics
1. Projects & Operations Personnel ^{/IM01/} 2. Local Stakeholders ^{/IM03/}	<ul style="list-style-type: none"> - General aspects of the project - Forest implementation - Project boundary - Technical equipment and operation - Changes since validation - Monitoring and measurement equipment - Re-measurement of sample plots - Remaining issues from validation - Calibration procedures (if applicable) - Quality management system - Involved personnel and responsibilities - Training and practice of the operational personnel - Implementation of the monitoring plan - Monitoring data management - Data uncertainty and residual risks - GHG emission removal calculation - Procedural aspects of the verification - Maintenance - Environmental aspects

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

2.7 Resolution of Clarification and Corrective Action Requests

2.7.1 Definition

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

- mistakes have been made in assumptions, application of the methodology or the project documentation which will have a direct influence the project results,
- the requirements deemed relevant for validation of the intended / implemented changes,
- there is a risk that the changes cannot be approved by the UNFCCC or that emission reductions would not be able to be verified and certified after the implementation of the changes.

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

2.7.2 Assessment

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

The final reporting step starts after resolution of the raised CARs and CLs. In case the findings from CARs and CLs cannot be resolved by the project proponent or the proposed action related to the FARs raised cannot be assessed as adequate, no positive assessment opinion can be issued by the validation team.

The CAR(s) / CL(s) / FAR(s) are documented in the context of the respective chapters.

2.8 Technical review

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

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

2.9 Final approval

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

Only after this step the notification or the report can be forwarded to the UNFCCC (in case of a positive validation opinion).

3 CHANGES THAT DO NOT AFFECT THE PROJECT DESIGN

3.1 Assessment of Changes

Requested Deviations / Changes #1

- Type of change(s):
- ☐ Temporary Deviation from Monitoring Plan
 - ☐ Temporary Deviation from Monitoring Methodology
 - ☐ Corrections that do not affect the project design
 - ☐ Permanent Change from Monitoring Plan
 - ☐ Permanent Change from Monitoring Methodology
 - ☒ Changes specific to afforestation or reforestation

A. Description of post registration change

Start Date:

Please provide the start date of the change

25/06/2001

End Date:

Please provide the end date of the change, if applicable

-

Description:

Please give a detailed description of the changes

In line with "Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities" (Version 01.0) (EB 68, Annex 31), some improvements to early versions of the methodology are allowed and have been adopted in the project monitoring plan.

1- Only data and parameters obtained from field measurement are monitored; intermediate values are not considered in monitoring.

2- Change in sampling design

3- Uncertainty analysis is not conducted as sampling approach implemented addresses these issues.

4- Loss of carbon in living herbaceous vegetation has not been monitored.

5- Emissions from burning of fossil fuel, both within and outside the project boundary were not monitored.

Requested Deviations / Changes #1

B. Assessment of post registration change – specific to A/R

Accuracy: Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation.	All above changes are covered under the “Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities” (Version 01.0) (EB68, Annex 31). Therefore it can be concluded that revisions are accurate and correct.
Conservative-ness: Please give a detailed assessment whether conservative assumptions or discount factors have been have been applied to ensure that ER will not be overestimated.	All revisions are conservative considering and comparing with the latest applicable versions of A/R methodologies.
Appendix 1 PS: Check if the changes fall under one of the scenarios of appendix 1 of the PS.	As per EB 68 Annex 31 these changes do not require prior approval.

C. Revised PDD

Rev. of PDD: Check whether the changes have been fully addressed in a revised PDD.	<input type="checkbox"/> The changes have correctly been reflected in the revised PDD. <input checked="" type="checkbox"/> A revision of the PDD is not required (in case of temp. Changes and A/R specific changes). <input type="checkbox"/> The revised PDD has been forwarded in (i) track-change and (ii) clean version.
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D. Prior Approval

Prior approval: Assess whether the change requires prior approval of the board	<input type="checkbox"/> <i>The post registration change requires prior approval</i> <input checked="" type="checkbox"/> <i>The post registration change does not require prior approval</i>
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Requested Deviations / Changes #2

Requested Deviations / Changes #2

- Type of change(s):
- ☐ Temporary Deviation from Monitoring Plan
 - ☐ Temporary Deviation from Monitoring Methodology
 - ☐ Corrections that do not affect the project design
 - ☐ Permanent Change from Monitoring Plan
 - ☐ Permanent Change from Monitoring Methodology
 - ☒ Changes specific to afforestation or reforestation

A. Description of post registration change

Start Date: Please provide the start date of the change	25/06/2001	End Date: Please provide the end date of the change, if applicable	-
Description: Please give a detailed description of the changes	<p>In line with Guidelines on accounting of specified types of changes in A/R CDM project activities from the description in registered project design documents" (Version 02.0) (Annex 24, EB 66), following changes have been made to the implementation of the project:</p> <p>c- Stocking Density- Changes in stocking density from 3x1.5 m as given in the registered PDD to different dimensions such as 2x2m, 2.5x1.5m, 2x1.5m, 1.5x1.5m, 2x1m, 1.5x1m and 1x1m.</p> <p>e- Changes in timing of harvest occurring before the third verification (Harvesting Timing)- There have been changes in the schedule of harvesting. Harvesting cycle as per registered PDD is 1st harvest at 5th year and subsequent harvests at 4 years. However, all the landowners have not adhered to 5th year 1st harvest, or 4th year second harvest in some cases.</p> <p>k- <i>Ex post</i> stratification has been implemented taking into account the changes to <i>ex-ante</i> stratum adopted at the project design i.e. based on change in harvesting time. Whereas in <i>ex-ante</i> stratification there was 7 strata, there are 17 strata in the <i>ex-post</i> stratification.</p> <p>m- Number of Permanent Sample Plots: As a follow up to <i>ex post</i> stratification, the calculation of number sample plots and their allocation has been revised. Number of Permanent Sample Plots have reduced from 1041 (original, as in PDD) to 48 (<i>ex-post</i>,</p>		

Requested Deviations / Changes #2

	<p>restratified, as in final MR). The number of sample plots laid out, however, was 244, which exceeds the number required (48) to meet required precision and confidence levels.</p> <p>n- Plantation area - The project boundary was verified during the 1st periodic verification in 2011. GIS technique was used and the stratum area adjusted accordingly. It is found that the total area has reduced by 442.19 hectares compared to the information provided in the registered PDD. The stratum wise decrease in the area is presented in table B.3 of the monitoring report. These changes are consistent with the baseline identification and additionality demonstration made at the validation stage.</p> <p>p- Volume equation -Changes in parameters, equations, or methods used in tree biomass estimation are consistent with A/R Tool – “Tool for demonstration of applicability of allometric equations in A/R CDM project activities” The changed parameters, equations or methods do not result in a decrease in precision of the estimate of tree biomass.</p> <p>The equation for estimating volume of commercial component of trees have changed. The equation as per section D.1 of the registered PDD is reproduced below,</p> $V = -2.4726 + 0.4354 B \times H \text{ (m}^3\text{/ ha)} \quad (n = 125, R^2 = 0.9956)$ <p>This has been changed to the below equation:</p> $V = -0.0001 + 0.31145 \times D^2 \times H \text{ (m}^3\text{)} \quad (n = 580, R^2 = 0.9855)$
B. Assessment of post registration change – specific to A/R	
<p>Accuracy: Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation.</p>	<p>All above listed changes could be confirmed during the site visit and can be accepted as per the following justification:</p> <p>c- As per the registered PDD, a spacing of 3x1.5m was to be adopted. However, during verification it is observed that there are changes in the stocking density, as the spacing is found to vary in different parcels such as 2x2m, 2.5x1.5m, 2x1.5m, 1.5x1.5m, 2x1m, 1.5x1m and 1x1m. This is detailed in table B.5 of the MR. The reason for the changes are found to be local demands from villagers for a denser stock, and such local demands. It is also observed that in a majority of the plots, the original stock density is being maintained. Further, this change in the density is found</p>

Requested Deviations / Changes #2

	<p>not to affect the baseline or the additionality of the project as set at the time of validation. The changes are observed to be arbitrary in nature rather than on a planned scale. Further, the changes are found to have no impacts calculation of project removals. All the trees within a PSP of 20X20 m are found to be included in monitoring and the recordings, irrespective of the stock density. Further, the calculations are based on volume per tree, from which the final project removals are calculated. Since this change does not affect baseline or additionality, with reference to §4 (c) of Annex 24 EB 66, the change is acceptable.</p> <p>Stocking density changed in some areas depending on actual site conditions. Further due to natural regeneration stocking density varies on these sites. The changes are consistent with the baseline identification and additionality demonstration made at the validation stage. The additionality was proven by barriers that are not affected by this change and the baseline is not affected.</p> <p>e- Changes in timing of harvest occurring before the third verification have been observed. As per the registered PDD, the harvesting cycle consists of 1st harvest at 5th year and consecutive harvests at every 4th year. However, variations in harvesting have been observed in the planted area. This is mainly found to be because of the demands from the landowners regarding timing of harvesting. In some instances, the harvesting has been found to be early than the 5th year and in some later than 5th year. This does not affect stratification as stratification n is based on the year of plantation and not harvesting. Further, the project activity consists of the same species being planted in similar edaphic and climatic conditions which will result in similar growth patterns. The verification is based on the standing crop, and actual measurement. This change also does not affect additionality of the project. Hence in line with § 4 (e) of Annex 24 of EB 66, this change is acceptable.</p> <p>k- To perform sampling re-stratification was required. The strata have been corrected based on age of plantation on re-stratification. This reduced the variance within the stratum and is thus more precise and acceptable.</p> <p>m- As per the registered PDD, minimum 1041 sample plots had to be laid. However, it is noted that originally 1305 sample plots</p>
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Requested Deviations / Changes #2

	<p>were selected for monitoring. The calculation of the number of the sample plots during validation is observed to be based on the assumed AGB per hectare. However it is observed that the actual ground conditions was different, and such high AGB assumed during validation for calculation of sample plots was not observed during the implementation of the project activity. By keeping the standard deviation (30%), precision level (10%) and confidence level (95%) same, sample plots have been re-calculated, and found to be 244. This is detailed in Table B.4 of the MR. The 244 permanent sample plots are found to be selected randomly using chits from the list of 1305 parcels which contained the PSPs. The land and edaphic conditions of the project activity are homogenous. The method of selecting PSPs has been found to be free of biases. The laying of the PSPs has followed a random method of demarcating the PSP along different directions of the 244 selected. Further, the verification team also visited plots which did not contain any sample parcels and made comparisons with sample plots. No bias was observed in the stand of parcels without any sample plots as compared to the sample plots. The calculation of the PSPs has been reviewed in detail, and is found to be acceptable. The verification team states with high confidence that since the edaphic conditions are similar, a decrease in the number of sample plots shall not affect the emission reduction estimations. In this context, the change in the number of PSPs is acceptable, and is also in line with Annex 24 of EB 66.</p> <p>As per point k revised stratification leads to revised sampling.</p> <p>n- The land area for which the control over A/R CDM project activity has been established by the project proponents since validation has changed. The change in land area is limited to reduction in project area (i.e. from 14969.46 ha in PDD to 14527.27 ha in this verification), which is a decrease of land area by 2.95%. The changed project boundary is fixed in such a way that it geographically delineates exclusively the reforestation project activity under the control of the project participants. The changed boundary of A/R CDM project activity geographically delineates exclusively the reforestation project activity under the control of the project participants. The changes are demonstrated at verification are consistent with the baseline identification and additionality demonstration made at the validation stage. This decrease in the land area does not affect baseline identification, as the land was part of the project area at the time of baseline identification. Further, the change in the land area does not</p>
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Requested Deviations / Changes #2

	<p>constitute a change in the barriers identified during validation. The decrease in land is spread over the whole of the project land, in different strata, owing to many different reasons. The barriers identified during validation are observed to be present, and applicable to the remaining parcels of land. There is no change in the pattern of ownership, which is still predominantly tribal. It is also confirmed that as per §109 of the project standard, project boundary has been fixed in such a way that it geographically delineates exclusively the registered CDM A/R project activity under the control of the project participant. The changes are consistent with the baseline identification and additionality demonstration made at the validation stage. The additionality was proven by barriers that are not affected by this change and the baseline is not affected.</p> <p>p- The equation used to estimate tree biomass has been changed. The volume equation mentioned in step 2 of section D.1 of the PDD was for estimation of volume/ha. However to ensure more accurate estimation, and to be consistent with step 4 of the estimation as given in the registered PDD, a new allometric equation for volume per tree has been chosen. The applicability of the changed equation has been demonstrated at verification using the AR methodological tool “Demonstrating appropriateness of volume equations for estimation of aboveground tree biomass in A/R CDM project activities” ver 1.0.1, Annex 24 EB 67.</p> <p>As per §5 of Annex 24, EB 67, <i>species-specific or group-of-species-specific volume table or volume equation derived from trees growing in edapho-climatic conditions similar to those in the project area is considered appropriate, and hence can be used for ex post estimation of tree stem volume, if at least one of the following conditions is satisfied:</i></p> <p><i>(a) The equation is used in the national forest inventory, or the national GHG inventory, of the host Party;</i></p> <p><i>(b) The equation has been used in commercial forestry sector of the host Party for 10 years or more;</i></p> <p><i>(c) The equation was derived from a data set of at least 30 sample trees, and the value of coefficient of determination (R²) was not less than 0.85.</i></p> <p>The equation used has been published by Forest Survey of India. It is also observed that this reference is the same used in the registered PDD (“Volume Equations for Forests of India, Nepal and Bhutan” published by Forest Survey of India, 1996. Page</p>
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Requested Deviations / Changes #2	
	<p>226) which is acceptable. Further, as per the details provided in the publication, the volume equation has been derived from data set of $n = 580$ and coefficient of determination $R^2 = 0.9855$. This meets criteria (c) of §5 of the tool, and thus qualifies the equation to be used for estimating tree volume.</p> <p>Latest available allometric equation has been applied to the project for biomass estimations. All equations are completely in compliance with the “Tool for demonstration of applicability of allometric equations in A/R CDM project activities”. Follow assessment in section 5 of FVR.</p> <p>Therefore it can be concluded that revisions are accurate and correct.</p>
<p>Conservative-ness: Please give a detailed assessment whether conservative assumptions or discount factors have been applied to ensure that ER will not be overestimated.</p>	<p>The changes are consistent with the baseline identification and additionality demonstration made at the validation stage. They all improve the accuracy of the estimations of ERs. Therefore it can be concluded that revisions are accurate, conservative and correct.</p>
<p>Appendix 1 PS: Check if the changes fall under one of the scenarios of appendix 1 of the PS.</p>	<p>The A/R specific changes do not require approval by the board as they are listed in PS appendix 1 and as per Paragraph 4 (c), Paragraph 4 (e), Paragraph 4 (k), Paragraph 4 (m), Paragraph 4 (n) and Paragraph 4 (p) of EB 66 Annex 24.</p>
C. Revised PDD	
<p>Rev. of PDD: Check whether the changes have been fully addressed in a revised PDD.</p>	<p><input type="checkbox"/> The changes have correctly been reflected in the revised PDD.</p> <p><input checked="" type="checkbox"/> A revision of the PDD is not required (in case of temp. Changes and A/R specific changes (defined as minor)).</p> <p><input type="checkbox"/> The revised PDD has been forwarded in (i) track-change and (ii) clean version.</p>
D. Prior Approval	
<p>Prior approval: Assess whether the change requires prior approval of the board</p>	<p><input type="checkbox"/> The post registration change requires prior approval</p> <p><input checked="" type="checkbox"/> The post registration change does not require prior approval</p>

3.2 Related Findings

Follow up on related findings in the Final Verification Report.

4 CHANGE TO THE START DATE OF THE CREDITING PERIOD

The post registration changes do not fall under this category.

4.1 Related Findings

No findings have been identified in this context.

5 CHANGES TO THE PROJECT / PROGRAMME DESIGN

The post registration changes do not fall under this category.

5.1 Related Findings

No findings have been identified in this context.

6 SUMMARY OF ASSESSMENT OPINIONS

The below listed changes have occurred after the registration of the project / PoA.

Type of Change occurred	Total No. of changes	No. of changes which require prior approval
<input type="checkbox"/> Temporary deviations from the MP		
<input type="checkbox"/> Temporary deviations from the MM		
<input type="checkbox"/> Corrections that do not affect the project		
<input type="checkbox"/> Change to the start date of the crediting p.		
<input type="checkbox"/> Permanent changes from the MP		
<input type="checkbox"/> Permanent changes from the MM		
<input type="checkbox"/> Design changes to the project activity / PoA		
<input checked="" type="checkbox"/> Changes specific to AR projects		

None of the changes requires prior approval of the Board.

New Delhi, 2013-06-27



Lokesh Chandra Dube
TÜV NORD JI/CDM CP
Assessment Team Leader

Hannover, 2013-06-27



Alexandra Nebel
TÜV NORD JI/CDM CP
Final Approval

7 REFERENCES

All references are listed in the Verification Report to which this assessment is attached.

APPENDIX

- A1:** Assessment of Financial Parameters
- A2:** Assessment of Barrier analysis
- A3:** Competence statements of involved personnel

APPENDIX 1: ASSESSMENT OF FINANCIAL PARAMETERS

Table A-1: Assessment of Financial Parameters (VVS, v. 2.0, §§ 120, 121 / in case financial parameters stem from FSR §122)




<input checked="" type="checkbox"/>	No financial parameters are used for additionality justification					
<input type="checkbox"/>	Assessment of all financial parameters see below					
Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE ASSESSMENT	
					Correctness of value applied	Comment
				//	<input type="checkbox"/>	
				//	<input type="checkbox"/>	
				//	<input type="checkbox"/>	
				//	<input type="checkbox"/>	
				//	<input type="checkbox"/>	
				//	<input type="checkbox"/>	
				//	<input type="checkbox"/>	

APPENDIX 2: ASSESSMENT OF BARRIER ANALYSIS

Table A-2: Assessment of Barrier Analysis (VVS, v. 2.0, §§ 124-127)

<input checked="" type="checkbox"/>		No barrier parameters are used for additionality justification		
<input type="checkbox"/>		Assessment of barriers see below		
Kind of Barrier (invest, tech, other)	Description of Barrier	Evidence used	Assessment of validation team	
			Appropriateness of information source	Explanation of final result
			<input checked="" type="checkbox"/>	
			<input checked="" type="checkbox"/>	
			<input checked="" type="checkbox"/>	
			<input checked="" type="checkbox"/>	
			<input checked="" type="checkbox"/>	
			<input checked="" type="checkbox"/>	
			<input checked="" type="checkbox"/>	

APPENDIX 3: STATEMENTS OF COMPETENCE OF INVOLVED PERSONNEL

<div style="text-align: right;">  </div> <p style="text-align: center;">Statement of Competence Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program</p> <p style="text-align: center;">Mr. Lokesh Chandra Dube</p> <table border="1"> <thead> <tr> <th>SCHEME</th> <th>STATUS</th> <th>VALID UNTIL</th> </tr> </thead> <tbody> <tr> <td>CDM</td> <td>Lead Assessor (Validation, Verification) Technical Reviewer</td> <td>2015-06-03</td> </tr> <tr> <td>VCS / ISO 14064-2</td> <td>Lead Assessor Technical Reviewer</td> <td>2015-06-03</td> </tr> </tbody> </table> <p>Authorization status for technical areas within sectoral scopes:</p> <table border="1"> <thead> <tr> <th>CODE</th> <th>TECHNICAL AREA</th> </tr> </thead> <tbody> <tr><td>1.2</td><td>Renewable Energies</td></tr> <tr><td>3.1</td><td>Energy Demand</td></tr> <tr><td>13.1</td><td>Waste Handling and Disposal</td></tr> <tr><td>13.2</td><td>Animal Waste Management</td></tr> <tr><td>14.1</td><td>Forestry</td></tr> <tr><td>15.1</td><td>Agriculture</td></tr> <tr><td>15.2</td><td>Animal Waste Management</td></tr> </tbody> </table> <p>155 – Rev. 3, Date: 2012-06-15</p> <p style="font-size: small;">155_S01-F003_2012-06-15_rev3.doc</p>	SCHEME	STATUS	VALID UNTIL	CDM	Lead Assessor (Validation, Verification) Technical Reviewer	2015-06-03	VCS / ISO 14064-2	Lead Assessor Technical Reviewer	2015-06-03	CODE	TECHNICAL AREA	1.2	Renewable Energies	3.1	Energy Demand	13.1	Waste Handling and Disposal	13.2	Animal Waste Management	14.1	Forestry	15.1	Agriculture	15.2	Animal Waste Management	<div style="text-align: right;">  </div> <p style="text-align: center;">Statement of Competence Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program</p> <p style="text-align: center;">Mr. Ashwin A.S.</p> <table border="1"> <thead> <tr> <th>SCHEME</th> <th>STATUS</th> <th>VALID UNTIL</th> </tr> </thead> <tbody> <tr> <td>CDM</td> <td>Lead Assessor (Validation, Verification) Technical Reviewer</td> <td>2015-07-24</td> </tr> <tr> <td>VCS / ISO 14064-2</td> <td>Lead Assessor Technical Reviewer</td> <td>2015-07-24</td> </tr> </tbody> </table> <p>Authorization status for technical areas within sectoral scopes:</p> <table border="1"> <thead> <tr> <th>CODE</th> <th>TECHNICAL AREA</th> </tr> </thead> <tbody> <tr><td>1.2</td><td>Renewable Energies</td></tr> <tr><td>14.1</td><td>Forestry</td></tr> </tbody> </table> <p>093 - Rev. 2, Date: 2013-03-20</p> <p style="font-size: small;">093_S01-VA060-F20_2013-03-20.doc</p>	SCHEME	STATUS	VALID UNTIL	CDM	Lead Assessor (Validation, Verification) Technical Reviewer	2015-07-24	VCS / ISO 14064-2	Lead Assessor Technical Reviewer	2015-07-24	CODE	TECHNICAL AREA	1.2	Renewable Energies	14.1	Forestry	<div style="text-align: right;">  </div> <p style="text-align: center;">Statement of Competence Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program</p> <p style="text-align: center;">Ms. Alexandra Nebel</p> <table border="1"> <thead> <tr> <th>SCHEME</th> <th>STATUS</th> <th>VALID UNTIL</th> </tr> </thead> <tbody> <tr> <td>CDM</td> <td>Senior Assessor (Validation, Verification) Technical Reviewer</td> <td>2016-03-03</td> </tr> <tr> <td>Ji</td> <td>Senior Assessor Technical Reviewer</td> <td>2016-03-03</td> </tr> <tr> <td>VCS / ISO 14064-2</td> <td>Senior Assessor Technical Reviewer</td> <td>2016-03-03</td> </tr> </tbody> </table> <p>Authorization status for technical areas within sectoral scopes:</p> <table border="1"> <thead> <tr> <th>CODE</th> <th>TECHNICAL AREA</th> </tr> </thead> <tbody> <tr><td>14.1</td><td>Forestry</td></tr> </tbody> </table> <p>095 - Rev. 4, Date: 2013-03-04</p> <p style="font-size: small;">095_S01-VA060-F20_2013-03-04_rev4.doc</p>	SCHEME	STATUS	VALID UNTIL	CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2016-03-03	Ji	Senior Assessor Technical Reviewer	2016-03-03	VCS / ISO 14064-2	Senior Assessor Technical Reviewer	2016-03-03	CODE	TECHNICAL AREA	14.1	Forestry
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